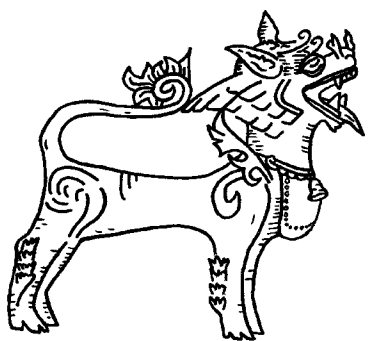


Forest Management by Nepali Communities

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LIST OF ACRONYMS

HMG/N	=	His Majesty's Government of Nepal
USAID	=	United States Agency for International Development
SIRE	=	Sustainable Income and Rural Enterprise
MWDR	=	Mid-Western Development Region
EFEP	=	Environmental and Forest Enterprise Project
MARD	=	Market Access for Rural Development Project
CFUGs	=	Community Forest Users' Groups
DFO	=	District Forest Officer
FINNIDA	=	Finnish International Development Agency
MLJPA	=	Ministry of Law, Justice and Parliamentary Affairs
FUG	=	Forest User Group
UN	=	United Nations
AFO	=	Assistant Forest Officer
NGO	=	Non-Governmental Organization
INGO	=	International Non-governmental Organization
VDC	=	Village Development Committee
INSEC	=	Informal Sector Service Centre
BASE	=	Backward Society Education

EXECUTIVE SUMMARY

Forest resources are integral elements of the farming system in Nepal. The yeoman and tenant farmers of Nepal must have access to forest and tree products such as fuelwood, fodder, leaf litter, and timber in order to survive. The forestry sector is considered the cornerstone in the incessant endeavour to develop the economy of Nepal. Historically, the government alone failed at conserving the forest and therefore was unable to curb the rampant deforestation both in the Hills and the Terai. In response to this inefficiency, the Nepalese government initiated the community forestry programme in 1978. The main objective of this programs is to permit local users or communities to control and sustainably manage local forest resources.

The Master Plan for the Forestry Sector, prepared in 1988, clearly promotes individual participation in forestry resource development, management, and conservation. Central to this community forestry policy is the gradual handing over of accessible hill forests to the communities that are able and willing to manage them. The Forest Act of 1993, established community forests as one of the five forest types that must be conserved and properly managed. Under the Forest Act, the District Forest Office is authorized to hand over any part of a national forest to a users' group which is then entitled to develop, consume, use, manage, sell and distribute the forest products from their community forest.

The Forest Rules and Schedules, promulgated in 1995, clearly specified the modus operandi of community forests. The 1995 operational guideline for community forestry development laid the foundations for the work to be done by grass-roots forestry staff working in communities which have either little to no training or practical experience in implementing community forestry programs. The operational guideline states that field staff must work closely with local communities, identify forest users, prepare operational plans, transfer the responsibility of managing community forests, and implement plans, etc. All of these initiatives accelerate the pace of handing over the national forests to the local users' groups.

Community forestry embodies a nascent sociological phenomenon -- a government authorizing the handing over of accessible forests to nearby communities. Handing over land to communities begins when the users hold a general meeting to identify potential user households and form a Community Forest Users' Group (CFUG). The meeting is led by the potential user households and in most cases, excludes indigenous forest management communities. There is always a representative present from the forest office who assists users with the formation of the CFUG.

The District Forest Officials designate a Ranger to be the chief architect of the CFUG constitution. Rangers are selected for this role, since they have the technical expertise necessary for drafting the CFUG constitution, which most of the villagers lack. The Ranger presents the drafted constitution in the general users' meeting for extensive discussions and deliberations. A democratic process is employed in the formation of the users' committee of the CFUGs. The representatives of the users'

committee are selected and elected by the users' at the general meetings. The candidates are proposed in the general meeting and judging upon their capabilities and popularity, the representative is elected. The forest management plan, like the constitution, is drafted by the Ranger who then presents the draft during the general meeting of the CFUGs for extensive discussions and deliberations. The draft version of the forest management plan is then submitted to the DFOs only after the CFUG members unanimously agree on its contents. The forest management plan is the five year plan for forest management, which contains the modus operandi of sustainable forest exploitation.

In summary, the following steps outline the process by which national forests are transferred to willing nearby communities:

- ▶ formation of a CFUG;
- ▶ submission of application to the District Forest Officer (DFO);
- ▶ preparation of the constitution;
- ▶ approval of constitution by DFO;
- ▶ preparation of forest management plan (operational plan); and
- ▶ approval of this plan by the DFO.

The users' committee can mete out punishments to violators of local norms, rules and regulations of the community forest management. The committee can arrest and penalize individuals who illegally cut branches off trees, uproot planted trees, illegally extract fodder/grass, timber and fuelwood, etc. The committee is also responsible for calling the users' meetings regularly, arrange training sessions to its members and other users, convey messages to the users, convince the users to abide by the CFUG constitution, make users participate in the afforestation, pruning, thinning and weeding activities, contact forestry officials for the necessary services, maintain book-keeping and official documents, distribute forest product permits to users, etc. Basically, the major responsibility of the users' committee is to manage the forest by implementing the forest management plan.

The right of the local forestry officials, particularly the District Forest Officer, is that he/she can also resume the forest if the user group has done anything that has a substantial negative impact on the environment or has not complied with the Forest Act (1993). They also reported that the DFO can penalize anyone including users' committees and their members working against the Forest Act and forest rules and regulations. The responsibility of the forestry official is to assist and monitor the implementation of forest management plan, follow-up the CFUG activities, provide regular supports to the CFUG (including financial, silvicultural and legal knowledge on community forestry by imparting training to the CFUGs), arrange tours to the members of users' committees and CFUGs, etc.

The benefits from the forest products have been distributed to individual households and to communities. Within the CFUG and indigenous forest management systems, the members are entitled to fuelwood, grass/fodder, leaf litter, green leaves, *Khar* (thatching materials), timber and medicines from plants, if necessary, to meet their household requirements. For the most part, user households pay a nominal charge for fuelwood, grass/fodder, thatching materials, and timber, whereas leaf litter, green leaves and medicinal plants are used free of charge. Members are entitled to access the benefits

that they deem necessary for meeting household requirements. However, members may only enjoy the benefits if they obtain a permit from the users' committees. The permit system is a measure used to maintain sustained utilization of forest. In addition to the benefits distributed to members at the household level, the profits collected from forest products sales and fines collected from violators of community norms were also deposited in bank accounts. In some cases, a substantial portion of the profits was invested in community development activities.

Since participation is key to the success of this environmental programme, it is necessary to study the knowledge and practices of CFUGs to determine which factors are contributing to program success or failure. In most communities, there are a multitude of caste or ethnic groups with diverse cultural backgrounds. Surprisingly, the caste/ethnic diversity does not cause negative impacts on the evolution of community forestry. This implies that most of the user households belonging to diverse caste/ethnic groups have similar socio-economic interests, which revolve around meeting their basic needs. The field level impressionistic data indicate that economically the visited communities are mostly homogenous as they are made up mainly of small and marginalized farmers who share similar socio-economic interests, despite cultural diversity. Interestingly, empirical evidence from the field shows that there is an increasing trend to involve women in the development and management of forests.

Both male and female members of the user committees, and some male users of the community forests are the most knowledgeable about the process of transferring national forests to communities. Many female and some male user informants are less acquainted with this process since forestry officials failed to widely promote community forests to a larger audience, thus leaving room for many locals to escape participation.

The NGO community and local or international organizations are concerned with female involvement in the development process. However, the data reflect that female participation in general meetings is extremely low to non-existent, with the exception of the meetings for community forests that have women-exclusive users' committees. Little to no female involvement mirrors the patriarchal value system that excludes women from participating in the male-dominated 'public domain'. Consequently, most general female users interviewed lack empirical knowledge about the CFUGs or the constitutions.

Results indicate that most of the women interviewed are not familiar with the CFUG constitution and the user committees. This lack of knowledge can be attributed to two reasons. One, little to no female involvement during the preparation of the constitution; and two, relatively low female literacy rates and years of education. Only the few women of the users' committee and the few knowledgeable women in the community understand the contents of the constitution and how it was prepared.

Although most of the female user informants are not acquainted with government policies about community forestry, the reverse is true for male users. Informants considered knowledgeable about this issue report that the government community forest policy defines local users as 'protectors' and 'managers' of forests. They believe that forest policy underscores the protection and management of the forests through the participation of the local communities. They further report that the policy's

intent is to transfer the forests to local users for their sustained utilization, thus encouraging local users to protect the forest as their own collective property.

This study also aimed at assessing how much the user informants know about soil conservation policy. Nearly all the informants interviewed, both male and female, reported that they are unaware of the government's current soil conservation policy. The government has taken a triage approach to their actions in line with soil conservation policies, by targeting endangered areas first, and then as a second priority, extending their services throughout the nation to the rest of the communities. The district soil conservation offices have in fact started working in a participatory fashion in the limited areas where soil erosion and land degradation problems are most serious.

Almost all the user informants of both sexes are knowledgeable of their rights and responsibilities as forest users. They all agree that they have the right to enjoy the available forest products to meet their household requirements. Similarly, their responsibilities are to protect the forest, establish nurseries, plant trees, participate in the activities organised by the users' committees, provide regular salaries to the forest guards, follow the government community forest policies, rules and regulations, extinguish the forest fires, stop cattle from entering the forest, etc.

By and large, user informants of both sexes welcomed the forest policies, rules and regulations. This positive attitude stems from sense that the locals are the protectors and managers of the forests and its resources. In essence, they created an environment for increased protection, management and sustained utilization of the forest and forest products, through the involvement of the beneficiary communities.

The post-hand over CFUGs are managing their forests pursuant to their management plan, consuming forest products sustainably. The users' groups appointed *Chaukidars* or forest guards to protect the forests. They are invariably paid a cash wage, which they received in the past to provide protection in general of those areas. The *Chaukidars* have a variety of the responsibilities including: regularly patrol of the forest; arrest violators of the CFUG rules, bring them to the users' committee where they are sentenced to a punishment; seize illegally extracted forest products; drive away the grazing livestock; and alert the users committees and CFUGs of forest fires and of other emergencies. Generally, a small amount of cash from each user household is collected at the end of the month for his emolument.

It has been ascertained that the user informants of the post-hand over communities have increased their knowledge of timber management, as a result of the required training and advice provided by the forestry officials. In general, they now have the knowledge and skills to carry out silvicultural activities such as in timber management and selective harvesting. The exception to the rule occurs with females (except the committee members) and some male informants. The timber management activities carried out by the users of different CFUGs and indigenous forest management systems also vary by types and stages of development of the community forestry program. For example, the members of post-hand over CFUGs practice pruning, thinning and selective harvesting more than the pre-hand over CFUGs and indigenous forest management communities. Members of CFUGs who have been provided forest management skills/training hold positive attitudes towards the forestry

officials for the services rendered to them. The user informants are knowledgeable of the exploitation of fuelwood, fodder/grass and *Khar* (thatching materials) on a sustainable way and are doing the same. But they lack knowledge on the sustainable exploitation of medicinal plants -- a function of lack of training.

The informants identified a myriad of factors contributing to the successful implementation of a community forestry program, among these are as follows:

- ▶ the strong unity among the users for a common goal;
- ▶ the adequate technical and administrative support from the forestry officials;
- ▶ the provision of adult literacy classes (for awareness building);
- ▶ the community sense of ownership and the consequent efforts or collective responsibilities for control of prohibited activities;
- ▶ people's awareness towards the community forest;
- ▶ strict adherence to the community forest rules and regulations;
- ▶ timely resolution of the conflict; and
- ▶ "felt need" of the forest.

The following paragraphs provide further elaboration regarding key elements in the success of community forestry programs.

The data collection instruments designed for this study identified the factors contributing to the success of CFUGs. Most informants believed that the prerequisite for a successful CFUG is to have strong unity among its beneficiaries. Essentially there should not be any conflict of interest regarding the conservation of forests. For instance, the most successful CFUGs have generated considerable amount of income from the sale of forest products in addition to meeting the household requirements. This income was used to implement community development activities such as, establishing schools, constructing bridges, providing electricity, and providing a credit facility to the CFUG members.

A community sense of ownership leads to a sense of collective responsibility, which add to the performance of CFUGs. Once the forest is handed over to a community that is concerned with its basic needs or survival, it will inevitably work hard to survive and conserve the forest. After the implementation of community forestry programs, case studies have portrayed a change in the behavior of user households. In fact, the user household recognizes that the protection of the forest is among their responsibility and they readily contribute money for the remuneration of the *Chaukidar's* services.

Another equally important factor is the 'felt need' of the forest. The case studies have amply demonstrated that farmers have started conserving forest through the formation of users' groups once they are in dire need of forest products such as firewood, fodder and timber. Previously, the users understood that the forests belonged to the government and thus it was the government's responsibility to protect them.

Finally, the strict adherence to community forestry rules and regulations is also important. Evidence shows that all hand-over CFUGs have developed or framed a constitution and management plan to

govern the behavior of the CFUGs members. The example set by the hand-over CFUGs have compelled each CFUG member to adhere to the community forestry rules and regulations, as embodied in the constitution and forest management plan. Failure to conform to the community norms results in punishment.

Barriers that prevent community forestry programs from operating were identified in this study. They include the following:

- ▶ disunity among the CFUG members;
- ▶ violation of the rules and regulations pertaining to the community forest;
- ▶ lack of forest management skills among the CFUG members;
- ▶ user lack of knowledge regarding community forest policies, rules and regulations;
- ▶ illegal exploitation of forests by neighbouring communities;
- ▶ deliberate cattle grazing;
- ▶ theft of the forest products;
- ▶ the human tendency to maximise one's own personal interests and benefits; and
- ▶ immoral behaviour.

Community forest boundaries are usually identified as the most common cause of conflict. The next most common conflict cause is the tendency among individuals to recognise the boundary of the ward or Village Development Committee (VDC) as the boundary of the community forest.

The authors make the recommendation that the video production firm use this report as a basis for the videos. Simply stated, the following themes must be incorporated into the story of the video:

- ▶ community forest policy;
- ▶ soil conservation policy;
- ▶ Forest Act of 1993;
- ▶ Forest Rules and Schedules of 1995;
- ▶ Operational Guideline of 1995;
- ▶ boundary conflict;
- ▶ CFUG constitution preparation process and its content; and
- ▶ forest management plan preparation and its contents including the silvicultural practices and forest protection methods.

The new videos should also address three issues: unity, sense of ownership, and felt need of the forest.

1.0 INTRODUCTION

The report is structured into seven major chapters. The first chapter, presents a short discussion on the background of the study, objectives and scope of the study and literature review on community forestry in Nepal. Chapter II presents the methodology employed to collect and analyse the data. Chapter III presents the basic sociological information on the study communities. Chapter IV deals with community and organizational processes vis-a-vis knowledge, behaviour and attitude of the CFUGs and indigenous forest managements. Chapter V presents the analysis on knowledge, behaviours and attitude of forestry and conservation policies, rules and regulations. Chapter VI deals with the knowledge on forest management technical skills and behaviour of the user communities. Finally, the summary, conclusions and recommendations have been presented in Chapter VII.

1.1 Background of the Study

Forest resources are the integral elements of the farming system in Nepal, particularly in the central Hills region. The yeoman and tenant farmers of Nepal need access to forest products such as fuelwood, fodder, leaf litter, and timber for the continuation of their survival. Hence, the forestry sector is considered a cornerstone in the incessant endeavour to develop the economy of Nepal. Historically, forests were unsustainably exploited by a myriad of events which transpired since the mid-1950's. Government policies coupled with unsustainable economic development efforts were the major culprits of the exploitation of Nepal's forests.

The following were the policies and political events that led to the destruction of forests:

- the government forest nationalisation in 1957;
- the land tenure system (which reclaimed land and land settlements to augment the state revenue), malaria control in the mid-1950s and the consequent influx of land-hungry migrants from the Hills to the Terai;
- political liberalization (opportunistic exploitation of forests during political transitions);
- the Land Act of 1964 (which could not appropriate the desired amount of excess land from the landlords for distribution to the needy people, due to the lack of a cadastral survey which destroyed the hill migrants' anticipation in the Terai went un-materialized);
- government resettlement programmes in the Terai; and
- burgeoning population growth and the subsequent increase in demand for forest products.

Furthermore, economic development efforts such as the following caused the exploitation of forests:

- implementation of development programmes, such as the construction of roads and hydro-power plants;
- urbanisation and the growth of administrative centres, placing increasing demands on the forest for clearance, settlement, and meeting fuelwood and timber demands;
- the commodification of the forest products, making livelihoods dependant on the poor; and
- opening borders leading to the integration of the Terai economy with India, thus causing theft and smuggling of timber. (Saussan, et. al., 1995).

As the forest resources began dwindling, it became apparent that they cannot be protected alone by the Ministry of Forest and Soil Conservation. In response, His Majesty's Government of Nepal (HMG/N) initiated in 1978 a community forestry programme in to support the involvement of local people in all aspects of forestry for their own benefit and the sustainable conservation of resources. The principle of community forestry is the control and the sustainable management of local forest resources by local users themselves. The pace of handing over national forests to local users has increased over the last 18 years and now many individuals know that they should protect and conserve forests, however they do not necessarily act upon that knowledge. The sustainable use of forest resources depends on three inter-related elements: (i) improved technologies (services, products and practices); (ii) enforced policies and laws and (iii) changes in the actions and behaviours of individuals.

Participation is key to the success of any environmental programme. The needs, values, and constraints faced by stakeholders must be the foundation upon which an effective environmental programmes are built. Participation of stakeholders in program design may help build consensus and thus facilitate the adoption and maintenance of behaviours advocated by such programmes. It creates a new kind of partnership among the experts and the individuals who will be affected by the programme for the environmental programme's success (GreenCOM, 1996). Under such circumstances, environmental education and communication play an instrumental role in both disseminating the knowledge among the users of forests and persuading them to act if they are knowledgeable or once they have knowledge.

Currently, USAID/Nepal's economic objective is to increase broad-based sustainable income growth. This objective is achieved through the Sustainable Income and Rural Enterprise programme (SIRE) which has two activities in Nepal's Mid-western Development Region (MWDR): (i) the Environmental and Forest Enterprise Project (EFEP) and (ii) the Market Access for Rural Development Project (MARD). In this context, we are primarily concerned with the EFEP project which provides assistance in nine of the 15 MWDR districts. The purpose of the EFEP is to increase the household income and increase democratic decision-making through local control and sustainable management of natural resources by community forest user groups, private farmers and entrepreneurs. There are five components under EFEP designed to achieve the objective of the project. The five interventions are the following:

- accelerating local control and management of natural resources;
- strengthening user groups;
- developing natural resource-based micro-enterprises;
- bottom-up planning and policy reform; and
- applied research.

Of all these components, we are primarily concerned with bottom-up planning and policy reforms which attempt to ensure that local implementation of forest legislation meets the original premise. Through this component, EFEP aims at initiating a public forum so that users and government policy makers can meet and periodically engage in a direct dialogue on the progress or problems of policy implementation. This forum is also designed to provide policy-makers with policy issues from the perspective of local forest users. Similarly, local forest users will have the opportunity to participate in the public "town meetings" to discuss important local issues (USAID, 1995).

This project component will be facilitated by the GreenCOM Project. GreenCOM will develop and field test the communications tools needed for continued policy dialogues and civic education. In order to fulfill its objectives, GreenCOM will carry out the following specific activities: (i) establish an environment and forestry forum; (ii) use mobile mass media for increasing local awareness to stimulate an improved "bottom-up" dialogue; and (iii) conduct forestry planning and budgeting workshops.

Given this background, the present study focuses on the knowledge, behaviour and attitude of the Community Forest Users' Groups (CFUGs), which would provide the priorities, possibly attained from the forestry fora, to be conveyed through a participatory video. Hence, this is a formative study since the future activities vis-a-vis the environmental education and communication component are contingent upon it.

1.2 Objectives and Scope of the Study

As outlined in the Terms of Reference (TOR), the objective of this qualitative research activity is to identify barriers and incentives which hinder or help individuals and groups from succeeding as CFUGs or Soil Conservation Groups. It is designed to :

- provide ideas and priorities for the producers of the community videos;
- contribute to the July 1997 Forestry Sector Co-ordination Meeting by providing issues for the meeting agenda and the USAID LCD presentation, and
- serve as the first set of CFUG interviews for policy dialogue evaluation task order three.

The group and individual interviews have been conducted with men and women in Salyan, Dang, Pyuthan and Banke districts. The interviews have focused on knowledge, attitude and behaviour related to community forestry and soil conservation. Broadly speaking, the following three major topics have been covered: (i) forestry and soil conservation policies/rules/regulations; (ii) technical skills in forest management and (iii) group processes. Gender issues have also been incorporated across these topics.

The following types of communities have been selected: (i) post-hand over CFUGs; (ii) pre-hand over CFUGs; (iii) no CFUGs but indigenous forest management groups. For each district, the research team has worked together with District Forest Officers (DFOs) of HMG/N and other EFEP partners (mainly CARE Nepal) to identify two pre-hand over communities, two post-hand over communities and one community with no CFUGs but practising indigenous forest management. Thus, five communities have been interviewed in each district.

1.3 Literature Review

This section briefly presents the development of community forestry in Nepal, the Master Plan for Forestry Sector, the Forest Act, the Forest Rules, Soil Conservation Policy, Operational Guidelines for Community Forestry Development and women in forestry.

1.3.1 Development of Community Forestry in Nepal

In the 1950's, development efforts were top-down and guided by economic growth principles. What was important then was to increase GDP, with little or not regard for the distribution of any growth achieved. Under that context, government officials involved in forest development worked as policemen, assuring timber companies access to natural resources and keeping local residents out of forests.

In subsequent years, with the growth of poverty, this approach was questioned, and it was replaced by one which stressed the importance of satisfying the basic needs of the population. This new approach called for the participation of beneficiaries in program development, and it was guided by a “development from below” paradigm. Under this context, forest development was expected to achieve two objectives:

- make forest products and trees accessible to rural populations, and
- increase benefits derived from forest resources to residents in or nearby forest areas.

In 1978, FAO published its landmark document “Forestry for Local Development, summarizing the principles guiding the new approach, community forestry began to be supported by FAO, and it was defined as forest development efforts which intimately involved local residents in forest activities. Subsequently, FAO (1985) argued that community forestry has two characteristics:

- it changes the role of government officials so that foresters become advisors and provide inputs for planting, managing and protecting the forest, and
- both forests and the rural poor extract and use the forest resources for their own benefit.

The development of community forestry in Nepal followed in the above-mentioned development paradigms. In 1957, the Nepalese government passed a law that nationalized all forests, placing them under the legal authority of the Department of Forests. As a means of managing forests, this legislation proved to be completely ineffective. The department was incapable of maintaining effective control over thousands of small patches of forest throughout the mountainous areas (Fisher, 1990). The objective of the legislation was to prevent the destruction of national wealth and to nationalize private forests for their adequate protection. This forest nationalization effort, together with a myriad of factors mentioned in the background of the study, led to large-scale deforestation. In response to the failure to protect the forests and in an attempt to conserve forest resources in accordance with the international development trends, in 1978 the Nepalese government reversed the forest policy and initiated a process of handing over the responsibility of forest protection to the local communities.

There were two forest regulatory acts enacted in 1978. These were *Panchayat Forest Rules* and *Panchayat-Protected Forest Rules*. Panchayat was a community - level administrative and political unit between 1960 and 1990 that has currently been replaced by the Village Development Committee.

- *Panchayat Forests* were defined as degraded forest areas entrusted to a village *Panchayat* for reforestation in the interest of the village community. These forests were limited to 125 hectares. The government (through foreign aid projects) provided land, seedlings, and technical assistance in return for labour and the community received all the income from the sale of forest products.
- *Panchayat protected forests* were existing forests entrusted to the local *Panchayats* for protection and proper management. They were limited to 500 hectares in each *Panchayat*, and were similar to *Panchayat Forests* except that villages received three-fourths of the income generated by the sale of forest products (Wallace, 197).

Official community forestry development was influenced by the introduction of the ‘user group’ concept as defined in the Decentralization Act of 1982. This Act promotes the user group concept as the most effective approach to development and management of natural resources in local communities (Messerschmidt, et. al. 1994).

Later in 1988, the *Master Plan for the Forestry Sector, Nepal*, emphasized the importance of community forests and noted that *Panchayat* was too large a unit for day-to-day-management of forests and pointed to the importance of user level management plan. This is right because *Panchayat* boundaries did not necessarily coincide with user-group boundaries. User groups are almost

invariably smaller than *Panchayats* and often cross *Panchayat* boundaries (Fisher, 1990). The, age-long indigenous practices (local initiatives) of resource management in the mid-hills have also helped materialize the concept of community forestry.

The Community Forestry Project was initiated in twenty-nine hill districts, with the assistance of the World Bank. In addition, community forestry was also initiated in several hill districts with bilateral assistance. In fourteen terai districts, community forestry programs were also made possible through another World Bank assistance project. Many lessons have been learned from these projects that could prove useful in determining how community forestry could evolve in the future (Ministry of Forestry and Soil Conservation and FINNIDA, 1988). Now the Forest Act (1993), Forest Rules and Schedules (1995) and Operational Guideline for Community Forestry Development (1995) have been the government efforts to develop and provide sustainable utilization of forest resources, with the involvement Forest User Groups (FUGs).

In order to provide clarity, it is important to define the term 'user group'. A 'user group' is simply the local community of forest users who have traditional tenurial rights (i.e. use - rights) over the resources (Messerschmidt, 1994). Conclusively, community forestry can be defined as the control and management of forest resources by the rural people who use the forest's resources especially for domestic purposes and as an integral part of their farming systems (Gilamour and Fisher, 1992). Thus, the control and sustainable management of local forest resources by the local users themselves is the principle of community forestry.

1.3.2 Master Plan for the Forestry Sector

In 1988, his Majesty's Government of Nepal (HMG/N) prepared the *Master Plan for the Forestry Sector*, with the financial and technical support of Finnish International Development Agency (FINNIDA) and Asian Development Bank (ADB). This document states that of the total area of Nepal, 14.7 million hectares, 5.5 million hectares are natural forests, that is 37 percent of its land. This spells out the policies for the sustained utilization of forests. The Plan has two sorts of objectives, viz, long-term and medium-term. The long-term objectives are:

- To meet the people's basic needs for fuelwood, timber, fodder, and other forest products on a sustained basis, and to contribute to food production through an effective interaction between forestry and farming practices.
- To protect the land against degradation by soil erosion, floods, landslides, desertification, and other effects of ecological imbalance.
- To conserve the eco-system and genetic resources.
- To contribute to the growth of land and national economics by managing forest resources and forest-based industries and creating opportunities for income generation and employment.

The medium-term objectives are :

- To promote people's participation in forestry resource development, management and conservation.
- To develop the legal framework needed to enhance the contribution of individuals, communities, and institutions to forest resource development, management, and conservation (the results are Forest Act of 1993, Forest Rules of 1995 and Operational Guideline of 1995).
- To strengthen the organizational framework and develop the institutions of the forestry sector to enable them to carry out their missions.

The Plan has formulated 12 programmes to meet these long-term and medium-term objectives of which community forestry and soil conservation and watershed management are our major concerns. The community and private forestry programme aims to develop and manage forest resources through the active participation of individual people and communities to meet their basic needs. The soil conservation and watershed management aims to protect the land against degradation and conserve its values through the mobilization of national and local resources.

The main programme components of community and private forestry are:

- Management of natural forests and enrichment planning of degraded forests, both as community forests.
- Establishment and management of community forests in open and degraded areas.
- Distribution of free or subsidized seedlings to encourage the establishment of private tree farms.
- Spreading the use of fuel-efficient stoves by supporting development, production, and distribution of such stoves.

The key policies which relate to community forestry include:

- Promotion of community forestry, entrusting forest protection and management to actual users.
- Priority to community forestry in the allocation of research and development resources.
- Phased handing over of all the accessible hill forests to the communities, to the extent that they are able and willing to manage them.
- Reception of all income (from the sale of forest products) by forest users.

- Emphasis on an extension approach and the retraining of the entire staff of the Ministry of Forest and Environment for their new role as advisers and extension workers.
- Formulation of simple management agreements as quickly as possible.
- Planning and rapid implementation of community forestry according to decentralization principles.
- Ensuring that local people benefit if they protect natural forests or plantations.

Eventually, as a partnership between the government and the people for forest management is established, a logical extension of community and private forestry will be people's participation in local soil conservation and watershed management, protection of local flora and fauna, and development of local forest-based industry (HMG/N and FINNDA, 1988). Thus, community and private forestry is the key approach to establishing and managing forests.

The Plan also contains a specific policy guideline for the soil conservation and watershed management. The geological forces (which are unpreventable) and human pressure on forest and agricultural land for meeting basic needs for food and forest products are destroying Nepal's land and soil resources. Therefore, the Plan has formulated three major programme components to address the problems of soil conservation and watershed management. They are:

- Preventive measures in cultivated lands, forest lands, shrub lands, grasslands, and settlement sites.
- Rehabilitative measures on hillslopes and in valleys including waterways.
- Conservation, extension and education and provision of technical and material assistance in mobilizing the community for soil conservation.
- Supportive components including organizational strengthening, staff training, technology development, watershed resources survey and management planning, and monitoring and evaluation.

Thus, Master Plan, if properly implemented, can help induce positive economic, social and environmental impacts by increasing fuelwood, fodder and timber production, income, greater employment opportunities, improving quality for life, having marginal effect on agricultural land and improving the management of forest resources.

1.3.3 Existing Forest Act

The existing Forest Act was enacted in 1993 for the conservation and proper management of forests. The preamble of the Act states, "Whereas it is expedient to manage national forests in the form of

government-managed forests, protected forests, community forests, leasehold forests and religious forests, thereby ensuring the development and conservation of forests and the proper utilization of forest products, and extend co-operation in the conservation and development of private forests, so as to meet the basic needs of the general public, attain social and economic development, and promote a healthy environment" (MLJPA, 1993:1). The preamble clearly presents the typology of the forests along with the enunciation of the underlying objective of the Act. National forests are all forests within the kingdom of Nepal whereas government-managed forest refers to only national forests managed by His Majesty's Government. Protected forests are national forests declared by His Majesty's Government as protected forests which have special environmental, scientific or cultural significance. A community forest is a national forest handed over to an users' group for its development, conservation and utilization for collective benefit. A leasehold is a national forest handed over as a leasehold forest to any institution for its conservation and utilization. A private forest is a forest planned, nurtured or conserved in any part of land owned by an individual.

The 1993 Forest Act specifies the provisions relating to community forests and the formation of users' groups. The District Forest Office is authorized to hand over any part of a national forest to a users' group in a form of community forest entitling it to develop, conserve, use and manage such forests and sell and distribute the forest products by independently forcing the prices pursuant to the operational plan. The concerned users of a forest, who would like to develop, conserve and use forest products for their collective benefit, form a users' group. The group must register at the District Forest Office, by submitting an application along with its constitution. The users' groups are required to manage the forests in accordance with the operational plan (forest management plan) approved by the District Forest Office. The Act stipulated that the users' group is an autonomous and a corporate body with perpetual succession. The users' group is authorized to amend the operational plan according to its particular need pertaining to the management of community forests. The users' group has its own fund created through government grants, donations, or assistance from any institution or individual, fines from illegal extraction of resources, and from the income from the sale and distribution of forest products. It must submit the annual report of its financial activities to the District Forest Office, mentioning the financial particulars and the condition of the community forest. Despite all these legal provisions, the District Forest Office can resume the handed over forest under any of the following conditions:

- if the users' group is unable to work according to the operational plan in any community forest handed over to it; or
- if it takes any action which affects the environment significantly; or
- if it fails to comply with the conditions to be complied with under this Act or Rules under it.

1.3.4 Existing Community Forest Rules and Regulations

Forest rules and regulations were also enacted in 1995, under the Forest Act. The government specified a number of rules and regulations for government-managed forests, protected forests,

community forests, leasehold forests, private forests and religious forests. But our primary concern is on the rules and regulations of community forests. There are thirteen rules and regulations for community forests, which include the following:

- determination of community forests;
- formation and registration of users groups;
- operational plan of the community forests;
- procedure of handing over the community forest;
- maintenance of records of community forests;
- actions prohibited in community forests;
- collection and sale and distribution of forest products;
- receipts and records of forest products;
- hammer mark to be registered;
- transportation of forest products;
- operation of user group fund;
- resumption of community forest
- and power to obtain assistance.

It has been stated that while handing over any part of a national forest to a users' group as a community forest, the District Forest Officer (DFO) has to consider the distance between the forest and village or settlement and the willingness and ability of the local users who intend to manage the forest. Users desiring to manage a forest as a community forest must submit a written application to the DFO and once the application is received, the DFO designates a technical employee (a Ranger) to provide technical support and direct the formation of users' groups and the preparation of its constitution. The constitution contains the following points and provisions:

- on the number of user households;
- population of the users' group;
- functions, duties, and powers of the users' group;

- procedure of forming the users' committee;
- names of office-bearers;
- functions and duties of the users' committee;
- working procedure of the committee;
- measures controlling forest crimes;
- punishes violators of the operational plan;
- and accounts for funds and auditing.

Once the constitution of the users' group has been approved by the DFO, users prepare a forest operational plan which includes objectives of forest management, forest production methods, silvicultural activities (thinning, pruning, clearing and other forest promotion activities), nursery, tree plantation, income generation activities, time-schedules, particulars of areas suitable for cultivation of medicinal herbs, arrangement on penalties and protection of wildlife. The operational plan is also prepared by the users with the technical and co-operation of the DFO and his Associates (Rangers). Once the operational plan is approved by the DFO, he will hand over the forest to the users group as a community forest after having it sign a bond stating its compliance with the conditions of the government. In so doing, he will issue a certificate to the users group.

The DFO, once handed over the forests to the community, has to maintain the records at his office. The users' group has to comply with the following prohibitions mandated by the Operational Plan:

- destruction of forests, or mortgage or transfer the ownership of the forest land;
- clearance of forest areas for agricultural purposes;
- building huts/houses;
- actions causing soil erosion;
- capturing or killing wildlife; and
- extracting or transporting rocks, soil, boulder, pebbles, sand, etc.

The users' groups can also obtain loans from the financial institutions by pledging the products of the community forests as hypothecation for the purpose of developing the forests. As specified in the

Operational Plan, the users' group can collect, sell and distribute the forest products. The sale prices have to be reported to the DFO.

Reforestation must be carried out as early as possible after the extraction of timber, wood and other forest products. The rule also allows users' group to run a forest based-industry outside the area of the community forest after obtaining permission from the concerned institution upon the recommendation of the DFO. The user group can consume forest products for each permit entitled to each committee. It must provide the DFO with a receipt of the forest products, in addition to the one issued to the buyer. It has to maintain accurate accounting records of income and expenditures. In order to transport timber from the community forest, the users' group has to prepare a hammer mark and submit the application to the DFO for registration. The users' group has to issue a permit and hammer mark the timber, when transporting the timber outside the area of the users' group. The users' group operates its fund and account through the joint signatures of the two office-bearers authorized by the group. There is an annual audit of income and expenditures conducted by an individual or institution, designated by the users' group. It can also obtain the necessary assistance from national, international and non-governmental agencies for the purpose of discharging its functions (HMG/N, Gazette 1995).

1.3.5 Operational Guideline for Community Forestry Development

Since the entire staff of the Department of Forests has not received previous training or has little practical experience in implementing community forestry programmes, there was a need to produce a set of operational guidelines to assist field staff in initiating the program. In early 1990, the first set of operational guidelines for implementing community forestry programmes was issued. These guidelines were based on limited experience, because of donors' development imperatives, which gave higher priority to establishing new community forestry plantations than to legitimizing community management of existing forests. On the basis of experience in the field, a revised and more detailed set of operational guidelines was prepared. These new guidelines were broadened to provide national guidance on the key policies as well as implementation methods for the government's community forestry programme (Bartlett, 1992:97).

The existing detailed operational guideline for community forestry development was formally prepared by the Community and Private Forest Division in 1995. It dictates that field staff have to work closely with local communities to identify forest users, prepare operational plans, hand over the responsibility of managing community forests, and to engage in other activities involved in implementing the plan. The operational plan specified four phases for planning community forestry development :

- an investigation phase;
- a negotiation phase;
- an implementation phase; and

- a review phase.

These phases basically orient the forestry office field staff about what they should be doing rather than how to do it. The operational plan allows a greater degree of latitude and flexibility to the field staff for programme implementation. The objectives of the investigation phase are: building trust between villagers and field staff; collecting social and technical information (needs, forest products, forest use and forest condition); identifying interest groups, primary and secondary users; learning about existing indigenous forest management systems, if any; and making users aware of government policy on community forestry, forest use and users' rights. Necessary activities which must occur prior to accomplishing the aforementioned objectives include:

- discussions about community forestry with the local community;
- identification and verification of users' households and forest area;
- identification of existing community management systems;
- ascertaining users' requirements; and
- assessment of the proposed community forest area are all

Analogously, the negotiation phase also contains five objectives: (i) ascertaining the users' requirements, problems and their solutions; (ii) obtaining the approval of users for community forest management; (iii) preparing forest users group's charter or constitution and registration of CFUG; (iii) formulating and obtaining approval of the operational plan and (iv) handing over the responsibility for managing the community forest to the FUG. The activities that allow for the accomplishment of these objectives are the following: the formation of FUG; identification of users' requirements; problems and solutions; preparation of the operational plan; review the composition of forest users committee; approval of the operational plan; and handing over the responsibility of managing the community forest.

The implementation phase has also a number of objectives which include:

- encouraging the users' groups to protect, develop and utilize the community forest in a sustainable manner;
- implementing the approved forest management programmes;
- keeping the accounts of the users' group up-to-date;
- monitoring the effectiveness of the forest management done by the users; and
- making the users' group self-sufficient.

This phase is divided into the following four major activities:

- assistance to the users' group in the implementation of the operational plan;
- monitoring the operational plan;
- strengthening the forest users' group; and
- revision of the operational plan.

And finally, the review phase has two objectives which include : (i) reviewing the operational plan after its expiry and (ii) discussing whether the users' group requires major changes in the operational plan. In accomplishing these two objectives, this review phase can be divided into three activities: (i) evaluation of the on-going operational plan; (ii) discussion on the revision of the existing plan or the implementation of a new operational plan; and (iii) approval of the revised or new operational plan.

Monitoring and record keeping is one of the principal tasks of the forestry officials at all levels of the Department of Forestry and its objective is to furnish the information to the management of central, district and area levels of the Department of Forests. Monitoring and record keeping are done at forest group level, Illaka (area) and range post levels. District guideline helps the field staff of the Department of Forests helps considerably in the implementation of the community forestry development programme.

1.3.6 Soil Conservation Policy

Since Nepalese people are predominantly rural, they rely heavily on natural resources such as soil, water and forests to meet their daily needs. During the monsoon, heavy rains erode fertile soil from the Hills and Mountains. Rampant deforestation, overgrazing, unscientific cultivation (particularly in the marginal land and steep slope), etc. are the principal factors contributing to the soil erosion. Water sources are drying up, land fertility is declining and the water cycle is being affected.

In 1974, the Department of Soil and Water Conservation was established to minimize adverse impacts on soil and water, through an integrated approach to agriculture, forestry, livestock, water resources and soil conservation strategies. Initially in 1981, the Department was named the Department of Soil Conservation and Watershed Management. It was renamed the Department of Soil Conservation in 1993 as part of an organizational reform. During the past two decades, the Department has encouraged projects that have been implemented with people's participation. The government then specified through its policy that the projects that cost one million rupees or less have to be implemented by users' groups. It was an opportunity as well as a challenge to actively involve local

people in every step of development such as, problem identification, project planning, maintenance and repair, monitoring, evaluation and benefit sharing (Department of Soil Conservation, 1993).

The Department has been expanding its programme to more and more districts of the country in phases. Now it operates in 45 of the 75 districts of Nepal. The principal policy objectives of the Department of Soil Conservation are to:

- . help people meet their basic needs for forest and food products by improving land and increasing agricultural productivity through proper conservation and utilization of watershed resources, and
- . assist in maintaining the environmental balance in the country's watersheds by reducing pressure from natural hazards such as floods and landslides.

For the smooth operation and management of soil conservation and watershed management programmes, His Majesty's Government of Nepal has adopted certain policies which are guided by appropriate watershed development principles. These principles include:

- to ensure proper land use by a rational land use planning;
- to implement integrated package programmes which include vegetative, agronomic and water management measures to tackle erosion problems using the watershed area as the unit of planning and management;
- to ensure the multiple use of land and water to fulfill diverse needs;
- to operate soil conservation and watershed management programme in line with the integrated management approach and on the basis of watershed conditions;
- to maintain links and networks, among the green and other sectors (forestry, agriculture, livestock, water and land resources);
- to ensure people's participation by developing appropriate technology and by conducting conservation extension, education and demonstration;
- to conserve, develop and manage land and water resources using the watershed area as the unit of planning and management;
- to develop infrastructure in a manner that would least disturb the environment and maintain balance between environment and development;
- to plant, protect watersheds near hydro-electric dams, irrigation systems and river banks; and

- to focus on soil conservation activities in the *Siwaliks* and other marginal lands (Department of Soil Conservation, 1996).

The Department has been launching a number of programmes to implement soil conservation and watershed management activities in line with the policies, principles and objectives formulated until present which comprise:

- land use planning (watershed management planning, sub-watershed management planning and land use development technical services);
- land productivity conservation;
- infrastructure protection (such as reservoirs, irrigation systems, trails, roads - use of bio-engineering);
- natural hazard prevention (reduction of the damage to life, property and valuable natural resources, gully treatment, landslide treatment, torrent control, stream bank protection and degraded land rehabilitation; and
- community soil conservation extension.

The government has accorded a top priority for the enhancement of people's participation in soil conservation and watershed management. The rationale is that government's efforts alone cannot be successful in the absence of community participation. Hence, the government has made it mandatory to involve people in all the conservation activities and to implement them together with the local users' groups. The level of participation varies from 10 to 50 percent of the cost of watershed management, depending upon the nature and scope of work (Department of Soil Conservation, 1996).

1.3.7 Women in Forestry Development

Women have been considered peripheral to development for a long time in most developing countries. The International Women's Year and the UN Decade of Women focused global attention on a situation of women. Development programmes became interested in the subject only after they realized that, by excluding women, they were losing half of their potential collaborators. In the Nepal, many programmes and organizations set up women's sections or added a female component to their regular programmes. Very few could, however, develop an appropriate strategy to improve the participation of women in their activities. Forestry programmes have followed the same general pattern as other development programmes. Problems in the participation of women actually arise when the programme has not been properly thought out and is not guided by the changing needs of the local community. Little can be expected from a situation where women's participation is seen only as additional work to be undertaken for the consumption of donors, policy makers, and other pressure

groups. If women's participation is seen as critical to forestry development activities, then the emphasis would logically move to actively organizing the participation of women. A special focus on women is required throughout the various stages of programme design, implementation, monitoring, and assessment (Siddiqui, 1989: 1-7).

In fact, there are a myriad of factors affecting women's participation in forestry which include gender division of labour, culture and social norms, prospect of benefits, sharing of benefits, programme requirements and the attitude and support of concerned agencies. Women have more household chores than men, while men have more occupational duties than women. Thus, the traditional belief that women's activities are almost exclusively confined to the home today is still continuing. Therefore, it can be expected that the less rigid the division of labour in a community, the higher can be the level of women's participation in a programme of the forestry. Cultural and social norms also determine women's participation. Although more women might be enticed to leave home to participate in outside economic and societal activities, a social norm which dictates that the women's place is the home and it is the husband's duty to support the family. Other norms stress that men are naturally superior to women (Regmi, 1989:16). While women suffered most from the decline in forest resources, they cannot articulate the problem to local planners because the traditional decision-making system favours more males than females and cultural norms allow men to contact and deal with male government officers (Baskota, 1978).

Another factor affecting women's participation in a development programme concerns the benefits that women receive after participating in the programme. In other words, the higher the benefits from a development programme, the greater would be women's participation in its activities (Regmi, 1989). Regmi (1989) further asserts that if there is higher level of equal sharing of benefits from a programme, the greater is the chance of women's higher participation in the programme. If the programme required women for the performance of its activities and if efforts are made to include them, this also helps enhance women's participation.

There is inability, on the part of governments of Third World countries, to appreciate women's productive activities and to understand what and how much women actually do. From the point of view of social forestry planning, an understanding of women's role is crucial for three reasons: (i) women have the most to gain from tree growing for subsistence purposes and for cash; (ii) more so than men, women are aware of the growing properties and diverse uses of the trees they regularly gather from and (iii) women are more permanent residents of the household than men (Shepherd, 1985).

Traditionally, though women were more involved than men in household production and gathering activities, particularly in fodder and fuelwood collection, and their roles are very well-known in forest-related activities, they were not involved in the approval of the management plan and the selection of the forest materials. The women did not also sit in any of the meetings of the forest committee which included local political male leaders as members. It can be concluded that if women are not involved in project planning and/or decision-making, they may have difficulty in conceptualizing project ideas or expressing their own needs (Shrestha, 1987). Therefore, the higher

the support given by the concerned agencies to women, the greater is the degree of women participation in a development programme of social forestry (Regmi, 1989). In a study on "Women's participation on Forest Committees", Parsai, et.al (1987) identified that organizers' knowledge of past forest use systems, discussion on roles, rights and authority prior to forest committee formation, selection and motivation of committee members, democratic working procedure of the committee, and participation of the forest officials contribute or influence the efficiency of women's forest committees.

Rural women are among the most frequent and most important forest users in Nepal. They are the ones who collect fodder and fuelwood and other forest products. They are the ones who suffer most when there are inadequate sources of water and fuelwood in their locality. Forests, for this reason alone, become a major concern for women. It seems essential, therefore, that women be involved in forestry development activities. Women in forestry in Nepal can be seen as an offshoot of women's participation in development. On the pattern of other Women in Development (WID) initiatives, where ad hoc activities are organised to include women in development programmes, the Women in Forestry (WIF) initiative is expected to think up novel ways to include women in forestry... Earlier, forestry interventions did not consider the possibility that women could form a special interest group and participate constructively in the intervention...

Now that women have been recognized as an important group of forest users, and their involvement is considered essential for the design and implementation of forest management and development activities, there is a more serious effort to improve their level of participation. In forestry, participation of the local community is encouraged and supported so that forests can be managed and utilized in a more fruitful manner. As "people", women exist as users in relation to local resources in the same manner as men do. The voices of women should be heard in relevant decision-making bodies. Forest management improves with the participation of women. The status of women improves as there is more participation of the women. They can then have improved access to information and resources, increased level of communication with larger groups, knowledge of alternative channels of communication, increased influence on decisions taken by the larger group, improvement in the position of the target group, and increased efficiency and efficacy of the main task in hand are certain indicators of effective participation.

Regarding women's participation in forestry, the main points to be noted are whether:

- women know more about forestry development activities;
- can get information from other sources if the immediate work group is unable (unwilling) to oblige;
- are maintaining a fair level of communication with the larger group;
- are aware of other channels of communication if there is breakdown within the present group;

- have an influence on decisions taken regarding development, protection and harvest of forests;
- have received benefits and gained in status following participation in forestry; and
- have contributed to the efficiency and efficacy of forest development and management activities (Siddique', 1989: 1-18).

Gradually, the crucial role of women as users and citizens is slowly being noted by the planners and implementors of forestry development activities. It follows as a corollary that there have been efforts at the grassroots level to include women in the executive committee of the Community Forest Users' Group (CFUG). In isolated cases, there have also been the empirical evidences of the exclusive women's executive committee of the CFUG. Despite this fact, the knowledge on the organisational process and the forest management skills is still not at par with that of the males -- a function of illiteracy, ignorance, dominance by the males, confinement to homes, very little or no contact with the outside world, etc.

2.0 METHODOLOGY

This chapter discusses a set of methods employed to accomplish the research objectives. More specifically, it contains a discussion on the desk review; type of data collected; study area; design, size and selection of sample; data collection instruments; study team composition and orientation; field work and supervision; study period; mode of data analysis and interpretation; and limitations of the study.

2.1 Desk Review

The New ERA study team began this study by doing the literature review at two stages, viz, preliminary stage for the formulation of detailed checklist on the knowledge, behaviour and attitude of the Community Forest Users' Groups (CFUGs) and advanced stage during the period of the report write-up to present a brief literature survey on the community forestry of Nepal as per the scope of work. In the latter stage, various studies on community forestry, Master Plan for Forestry Sector, Forest Act, Forest Rules and Regulations and Operational Guidelines have been reviewed. The review has provided the guidelines for the preparation and rarefaction of the methodology and presented the various activities undertaken for community forestry development in Nepal.

2.2 Type of Data Collected

The present study is primarily based on the empirical data collected from the field work. Notwithstanding this fact, secondary data have also been collected from the various published as well as unpublished reports, documents and articles. The combination of primary and secondary data has helped to provide an integrated picture on the knowledge, behaviour and attitude of the CFUGs.

2.3 Study Area

The study area comprises 20 communities using the forest of the four districts from the Mid-western Development Region. These districts comprise Banke in the Terai, Dang in the inner Terai, and Salyan and Pyuthan in the mid-hills.

2.4 Design, Size and Selection of Sample

This study is based on a stratified sample. The strata include communities with indigenous forest management, communities with post hand-over CFUGs and communities with pre hand-over CFUGs. The effort of the selection of the sample involved two stages, viz, selection of the communities and selection of the informants. The 20 communities were randomly selected by preparing a list of the universe of sampling units in consultation with the District Forest Officers (DFOs), Assistant Forest Officers (AFOs) in the Illaka (area) Forest Office, Rangers in the Range Posts and CARE Nepal staff

who have been involved in the community organizational process for the implementation of the community forests. The list of selected communities by state is presented in Table 2.1.

Table 2.1 : Sample Distribution of 20 Communities in the Four Sample Districts of Mid-western Development Region, Nepal

Typology of the Communities	Distribution by Sample Districts				
	Banke	Dang	Salyan	Pyuthan	Total
A. Post-hand over CFUGs	1. Gigara CFUG, Udrapur VDC 2. Mahila Upkar CFUG, Kohalpur VDC*	1. Takiyapur CFUG, Pawannagar VDC 2. Paluthan CFUG, Laximpur VDC	1. Laliguras CFUG, Sijwa Takari VDC 2. Sidha Gufa CFUG, Kajeri VDC	1. Bukenidada CFUG, Maranthana VDC 2. Paleban CFUG, Khalanga VDC	
Sub-Total	2	2	2	2	8
B. Pre-hand over CFUGs	1. Rimna CFUG, Mahadevpuri VDC 2. Jan Ekta CFUG, Komdi VDC	1. Chiurighat CFUG, Gangaparaspur VDC 2. Sarvodaya CFUG, Gadhwa VDC	1. Krisha Himali CFUG, Tribeni VDC 2. Gai Gaureni CFUG Tribeni VDC	1. Ghorthapa CFUG, Khaira VDC 2. Newarban CFUG, Khalanga VDC	
Sub-Total	2	2	2	2	8
C. Indigenous Forest Management Communities	1. Kaneshori Forest, Bilona VDC	1. Chandanpur Indigenous Forest Management Community	1. Sete Khola Indigenous Forest Management Community	1. Pallo Pakha Band Khola Indigenous Forest Management Community	
Sub-Total	1	1	1	1	4
Grand-Total	5	5	5	5	20

Note:* It was pre-hand over prior to the commencement of the field work but was formally handed over when the field work was going on. The study team included it in the sample because there was no other option in Banke district where there is very little work on community forest.

Both Banke and Dang, being the Terai (plain) districts, have had the motorable roads in almost all of the VDCs. Therefore, it was not possible to select a community without the transportational linkage. However, in the Hills, communities are relatively far-flung from the motorable road barring a few ones.

The selection of the informants was the second stage of the sampling process. Criteria were developed for the selection of informants to be included in the group interviews. Committee members of the CFUGs, literate and illiterate, and young and elderly members of the CFUGs were included in the sample as participants of the group interviews. Two group interviews (one male and one female) in each community were conducted and each group contained a range of seven to twenty three informants and participants. Thus, 40 group interviews were conducted, 20 male groups and 20 female groups.

Similarly, two key informants were also selected for obtaining the general sociological information in 20 communities who were CFUG leaders, VDC chiefs, ward members, chairmen of the executive committees of the CFUGs, and elderly village notables. Thus, 40 key informants were selected. In addition to these informants, eight other individual informants at the household level were also selected in each pre-and post-hand over community which comprised two CFUG executive committee members, one male and one female, and six CFUG members, three males and three females. If there were no female members in the executive committee, then an additional female CFUG member was selected for the interview. Thus, a total of 128 individual informants were selected for household interview. In isolated cases, non-CFUG member interviews were conducted by selecting one additional male and one female informant, only if there were non-CFUG members living in CFUG community. During the period of field work, four non-CFUG members were interviewed. Four informants were selected for household interviews in the indigenous forest management community which consisted of two males and two females. Thus, a total of 16 informants were selected for individual household interviews.

While selecting the informants for the individual household interviews, attention was paid to include informants of opposite characteristics such as young and elderly, literate and illiterate, active and inactive members of the CFUGs and indigenous forest management communities. The selection of all these informants was done using the judgemental sampling technique after building the rapport with the local communities.

2.5 Data Collection Instruments

An array of data collection instruments have been used, viz, key informant interview, group interview, in-depth individual household interview and observation -- all being derived primarily from anthropology. A brief discussion on each of these instruments employed to generate the data is presented below.

2.5.1 Key Informant Interview

An interview guide was used to elicit information on basic sociological information such as size of community (number of households), population distribution, caste/ethnicity, distance of the community from the road, farming systems, group formation history (CFUG and other), history of the development project/s (if any), etc.

2.5.2 Group Interview

Group interviews were conducted using an interview guide containing questions on knowledge, behaviour and attitude questions to address issues related to community and CFUG organisational processes (e.g. conflict resolution behaviour, group cohesion, democratic process, and attitudes), technical forestry skills and knowledge/attitudes regarding community forestry and soil conservation policies and regulations (rights and responsibilities). All the participants of the interviews were encouraged to express their views and the researchers played the role of facilitators.

2.5.3 In-depth Individual Household Interview

A questionnaire on similar themes as in the group interview was prepared to conduct the in-depth individual household interviews. The objective of this instrument was to garner in more comprehensive qualitative information about the CFUGs and indigenous forest management communities vis-a-vis knowledge, behaviour and attitude and thereby triangulate the information generated through the group interviews. Most data generated from the in-depth interviews were from case studies.

2.5.4 Observation

Observations were made during the period of the field work which included site observations of forest systems, such as whether crops were planted or conserved and what types of forest product management practices were used with timber and non-timber resources. The record keeping system of the CFUGs was also observed. Since seeing tangible results is most convincing, the observation tool complemented the validation of the information generated from the interviews.

2.6 **Study Team Composition and Orientation**

The New ERA research team comprised of an Administrative Coordinator; a Subject Matter Specialist; four Research Associates, one human ecologist, one sociologist, one livestock specialist and one economist by disciplines; and four senior Research Assistants. The recruitment of the Research Associates and Research Assistants was done on a competitive basis by looking at their previous experiences in the empirical research.

After recruited, field personnel were trained during five days. The first day of training focused on project objectives/goals, community forestry policy, soil conservation policy, community forestry

rules and regulations and techniques of field interviewing, including group interviews and individual in-depth interviews. On the second day, there was extensive discussion on the sampling procedures, direct and participant observation, triangulation, qualitative information organization, and techniques of preliminary field report write-up and familiarization with the interview guide. On the third day, field staff made a field trip and tested the different instruments in an adjoining hill district of Kathmandu Valley. Four groups were formed to conduct four different group and in-depth individual household interviews. The process was scrupulously supervised by the Subject Matter Specialist to streamline the interviews. On the fourth day of orientation, each team prepared its field report and presented the findings in an organized format and discussions were held among the participants to triangulate field findings. Discussions were also held on the problems encountered in using the discussion guides and report write-up. On the final day, discussions were held on un-clarified issues.

There was one research team in each of study district which was assigned to carry out the field work and prepare preliminary field reports. Each team had one Research Associate and one Research Assistant.

2.7 Field Work and Supervision

The field work lasted about one month beginning from March 15 to April 10, 1997. Each team worked in the field according to its own schedule and finished the field work on time. The work of the Research Associates and Research Assistants was supervised by the Subject Matter Specialist in all the four districts and the Administrative Coordinator in two districts. Each team was instructed to prepare a field report of each interview following an established format, field reports were checked by the Subject Matter Specialist who provided guidance on probing and report writing to improve the quality of the final product. Thus, guidance and supervision were provided in order to ensure the quality of the data.

2.8 Study Period

The study period was principally divided into three phases, viz, the preparatory phase for reviewing, designing and planning; field work and monitoring phase; and analytical phase, a compilation and analysis of the information collected; and preparation of the report. The time allocated for the study was three months, effective March 01 through May 31, 1997.

2.9 Mode of Data Analysis and Interpretation

This report is based on the qualitative data generated through the anthropological instruments such key informant interview, group interview, in-depth individual interview and observation. Such qualitative data were analysed by first reading all the original texts and then identifying and listing all conceptual categories/data. The identified data were marked (using colour for similar categories) and the possibilities of categories were exhausted. The relationship between the categories were also worked out by coalescing them or separating them as appropriate. Then, second order categories were prepared in a similar fashion by verifying the context of the original descriptions. Finally, third

order categories were made by developing generalizations. Interpretation of findings, including causes, consequences and interdependent relationships, is furnished in this report.

2.10 Limitations of the Study

The study does not claim that it has been fully successful in achieving its principal objective of identifying barriers or incentives to helping groups succeed as CFUGs or Soil Conservation Groups (SCGs). The inability to fully achieve the objective of the study can be primarily attributed to the lack of enough time for a full analysis of the bulk of the qualitative data. While conducting field work, some of the researchers might have had an unintended impact on the quality of research, due to the lack of disciplinary training on qualitative research. Finally, the study does not claim that the generalizations yielded from this study are equally applicable to other rural settings of Nepal, where the socio-economic conditions and the patterns of forest resource management are different. However, the research team has made an untiring effort to accomplish the aforementioned research objectives.

3.0 SOCIOLOGICAL INFORMATION

This chapter briefly presents the analysis of sociological data such as: the number of user households and their population; caste/ethnicity; composition of the users' committee and CFUG or user group formation history; number of advisors, mainly knowledgeable elderly people or village notables, to the users' committee; other social as well as infrastructural development activities; and the farming systems of the user communities. In addition to all this, some data that is apropos of the area of the forest is distance from the motorable road and typology of the forest. The data, after doing a very scrupulous review, have been presented in tabular forms for quick reference and clear comprehension, since a detailed description in sentences would be superfluous.

In most communities, there are a multitude of caste or ethnic groups with diverse cultural backgrounds. Surprisingly, this caste/ethnic diversity does not cause negative impacts on the evolution of community forestry. This indicates that most of the user households belonging to diverse caste/ethnic groups have similar socio-economic interests, which revolve around meeting their basic needs. Field observations indicate that despite cultural diversity, homogeneity of socio-economic interests is a function of the predominance of the small and marginalized farmers in the visited communities. Common property such as forests are well managed, especially when the communities are in need of conserving forest resources, even in large groups of up to 364 individuals.

Interestingly, empirical evidence from the field shows that there is an increasing trend to involve women in the development and management of forests. For example, in two communities visited, the members of the users' committees are all women. Analogously, women are also present, on a smaller scale, in most of the users' committees, except for in a few cases where they are male-exclusive. Female involvement in these communities reflects the concern of NGOs and the donor community about gender issues. The evolution of community forestry in this study embodies a nascent sociological phenomenon -- a government authorizing the handing over of accessible forests to nearby communities. The sociological information is summarily presented in Table 3.1.

Table 3.1 : Organization of Sociological Information of the Forest User Communities by Sample Districts

Typology of Forest User Communities by Districts	Area (in Has.)	Distance from the Motorable Road	No. of HHs	Total Pop.	Caste/Ethnic Groups	Type of Forest	Composition of Users' Committee	No. of Advisors' to the Committee	Other Devt. Project Activities	Major Crops Grown	CFUG/Group Formation History
A. Post-hand over CFUGs											
1. Banke :											
i. Gigara	134	500 meters. from the highway	276	875	Newars, Brahmins, Chhetris, Tharus and Muslims	Planted forest conserved	17 members including 4 females	-	-	Paddy, wheat, lentil and wheat	Since 1991
ii. Mahila Upakar	25.6	3 kilometers	63	483	Brahmins, Chhetris, Magars, Kamis and Damais	Conserved but has enrichment plantations	9 female members	5 males	UNICEF and Save Nepal have women upliftment programs	Paddy, wheat and legumes	Since August, 1996
2. Dang											
i. Takiyapur	3	2 kilometers	27	210	Tharus, Chhetris and Kamis	Planted	11 members including 3 males	-	BASE NGO's literacy program	Paddy, wheat, maize and mustard	Since 1994
ii. Paluthan	14.84	1 kilometer	55	321	Magars, Chhetris, Gurungs, Sarkis, Kamis and Damais	Conserved	11 members (originally one female was included but later she was dismissed)	-	-	Paddy, wheat, maize and mustard	Since 1981
3. Salyan											
i. Laliguras	35.3	5 kilometers	53	321	Chhetris and Newars	Conserved but has enrichment plantations	11 female members	4 males	Provision of contraceptives and immunization services by HMG's Public Health Office	Paddy, wheat, millet and legumes	Since 1989

Typology of Forest User Communities by Districts	Area (in Has.)	Distance from the Motorable Road	No. of HHs	Total Pop.	Caste/Ethnic Groups	Type of Forest	Composition of Users' Committee	No. of Advisors' to the Committee	Other Devt. Project Activities	Major Crops Grown	CFUG/Group Formation History
ii. Sidha Gufa	137.75	9 kilometers	346	1,724	Brahmins, Chhertis, Sarkis, Damais, Kamis and Badis	Conserved	17 members including 5 members	-	Drinking water by Asian Devt. bank and irrigation canal construction by CARE Nepal	Paddy, wheat and millet	Since 1988
4. Pyuthan i. Bukenidada	19.5	4½ kilometers	83	374	Magars, Sarkis, Chhetris, Kamis, Damais, and Brahmins	Conserved	13 members including 2 females	-	-	Paddy, wheat, potato, maize, barley and mustard	Since 1993
ii. Paleban	90	Close to the roadhead	226	1,304	Gurungs, Magars, Kamis, Damais, Sarkis, Newars, Brahmins and Chhetris	Conserved	13 members including 2 females	-	-	Paddy, wheat, pulses, potato and maize	Since 1978
B. Pre-hand over CFUGs 1. Banke i. Rinma	12	3 kilometers	203	1,797	Tharus, Chhetris and Kamis	Conserved	15 members including 4 females	-	-	Paddy, maize and wheat	Since January, 1996
ii. Jan Ekta	About 100	7 kilometers	364	2,000	Tharus, Chhetris, Damais, Sunwars, and Magars	Conserved	17 members including 4 females	-	Drinking water and sanitation launched by Plan International and human rights programs launched by INSEC	Paddy, maize, wheat, millet, lentils, etc.	Since December 1992
2. Dang i. Chiurighat	20	9 kilometers	73	369	Chhetris, Magars, Gurungs and Tharus	Both conserved and planted	13 male members (no females)	-	Literacy and income generating programs launched by BASE	Paddy, wheat, maize and mustard	Since 1991

Typology of Forest User Communities by Districts	Area (in Has.)	Distance from the Motorable Road	No. of HHs	Total Pop.	Caste/Ethnic Groups	Type of Forest	Composition of Users' Committee	No. of Advisors' to the Committee	Other Devt. Project Activities	Major Crops Grown	CFUG/Group Formation History
ii. Sarvodaya	67	5 kilometers	357	2,335	Tharus, Kumals, Brahmins, Chhetris, Muslims, Sarkis, Damai and Kamis	Both conserved and planted	13 members including 3 females	-	Literacy program launched by BASE. Provision of training on cutting/sewing by conscious Women's Society, and awareness created in the community by Youth Club, and activities of the Yadav Society for their upliftment	Paddy, wheat and maize	Since 1994
3. Salyan i. Krishna Himali	30	4 kilometers	35	275	Magars, Chhetris, and Brahmins	Conserved	14 members including 3 females	-	-	Maize, paddy and wheat and mustard	Since 1990
ii. Gai Gaureni	60	6 kilometers	152	1,007	Chhetris, Damais, Kamis and Sarki	Conserved	11 male members	2 advisors (male)	-	Maize, paddy and wheat and mustard	Since 1994
4. Pyuthan i. Ghorthapa	200	13 kilometers	91	455	Chhetris Kamis and Giris	Conserved	11 male members	-	-	Maize, paddy, millet and wheat	Since 1991
ii. Newarban	19.7	1½ kilometers	70	350	Brahmins, Chhetris, Sunwars, Damais and Magars	Conserved	11 members including a female	-	-	Paddy, wheat, maize, pulses, and mustard as well as barley	Since 1991

Typology of Forest User Communities by Districts	Area (in Has.)	Distance from the Motorable Road	No. of HHs	Total Pop.	Caste/Ethnic Groups	Type of Forest	Composition of Users' Committee	No. of Advisors' to the Committee	Other Devt. Project Activities	Major Crops Grown	CFUG/Group Formation History
C. Indigenous Forest Management Communities 1. Banke i. Biloma	61.2	Approx. 10 kilometers	255	3,500	Brahmins and Chhetris	Conserved	15 members including 6 females	-	-	Paddy, m millet and wheat	Since 1991
2. Dang i. Chandanpur	75	Approx. 4 kilometers (across the Rapti river)	230	1,900	Brahmins, Chhetris, Yadavs, Magars, Kamis, Damais, and Sarkis	Conserved	14 members (males)	-	-	Paddy, wheat and lentils etc.	Since 1991
3. Salyan i. Sete Khola	25	Not specified by the field researcher but the Subject Matter Specialist, on the basis of his visit to Salyan, approximates that it might be four to five kilometers from the district capital	128	897	Chhetris and Magars	Conserved	11 members including 2 females	-	-	Maize, millet paddy, lentils etc.	Since 1987 but informally it was exploited on a sustained basis for the last 100 years
4. Pyuthan i. Pallo Pakha Band Khola	62	-	100	600	Brahmins, Chhetris, Magars, and Newars	Conserved	7 members (only males)	-	-	Paddy, wheat pulses and barley	Since 1990 but it was conserved by a local <u>Guthi</u> organization for many years (unspecified) prior to 1951 and it was exploited on a controlled basis with the permission of local ward member for more than 30 years

Note : i. Livestock is the integral part of the farming systems of both the Hills and Terai. The livestock raised primarily consists of cattle, buffaloes, goats, etc.

- ii. The term 'indigenous' as used here in the text does not always necessarily mean traditional, because traditional management refers to practices which have been nurtured and practiced for many years. 'Indigenous' is basically a 'local people's initiative' which can also be a relatively recent innovation as in the case of Bilona and Chandanpur.

4.0 COMMUNITY AND CFUG ORGANIZATIONAL PROCESSES

This chapter presents a discussion on the knowledge of the CFUG members/users, the process of organization into a CFUG or users' communities, conflict resolution, constitution preparation, formation of users' committee, forest management plan, process of handing over the forest and post-CFUG formation support. Likewise, this chapter also includes a discussion about the distribution of benefits, financial management system, participatory planning and group networking. In this section the following issues are presented: attitudes of the users towards the services of the forestry officials; an analysis of the factors affecting the implementation of community forest management and barriers encountered during the period of the implementation of community forest.

4.1 Knowledge

4.1.1 Process of Organization into CFUG

The field data amply demonstrate that a myriad of factors were responsible for the initiation of community forestry and indigenous forest management systems in the communities studied. Among the causal factors that led to the initiation of community forest management systems are: historical rampant deforestation; impact of the observation tours, in the sites where the community forest programmes were fairly successful; advice from the DFOs and other forestry staff to initiate such programs; and inspiration by development-oriented agencies such as, Women Development Office and Women's Welfare Forum. Many other factors came from within the communities such as:

- local initiatives of household users which stemmed from their reliance on forests;
- earlier indigenous practices;
- personal initiatives taken by a few village leaders and conscious people;
- denial of the forest products from the forests controlled and managed by the nearby communities; and
- direct influence of the CFUG activities in neighbouring communities.

It was also inferred that in each of the communities studied, there is at least a combination of two factors that inspired people and users to unite for the conservation of the forest.

Once the communities decided to get organized, interested residents held a general meeting to identify the potential CFUG members. In almost all cases, barring the indigenous forest management communities, there was also a representative from the forest office to assist interested residents in the formation of CFUG. Field impressions indicate that there was little to no female participation in these general meetings, the exception occurring when female-exclusive users' committees are formed. The

low level or lack of female participation resulted from the male-dominated value system, which does not encourage women to participate in the public domain. Most women users interviewed did not know how CFUGs form. In most cases, the members of the users' committee knew more about how CFUGs are formed than the general forest users.

4.1.2 Conflict Resolution

Conflict is reported to be ubiquitous in ten CFUGs studied, whereas six of the CFUGs were conflict-free. Community forest boundaries are the most commonly reported cause of conflict. Individuals tend to recognize the boundary of the ward or Village Development Committee¹ (VDC) as the boundary of the community forest. This misconception results from individuals' inability to clearly comprehend the basic concepts of a community forest. Usually, forestry officials approach communities and request that the inhabitants of one ward or VDC relinquish the control they have over some portion of the forest to claimants of another adjoining ward or VDC.

Most conflicts were resolved, however some remained problematic. In one instance individuals alleged that their land was included in the forest. This was resolved by giving back the claimed portion of the forest land to the private owners. In another instance, some claimed that the inhabitants of neighbouring wards of the same VDC used the foot-trail within the forest. In response to this problem, the CFUG provided alternative foot-trails in the forest area for those users. The problem of illegal entrance of the inhabitants of one ward into the forests of another ward was resolved by appointing the *Chaukidar* (forest guard). The issue of whether or not to leave some portion of degraded forest unprotected for livestock and grazing remained unresolved, however, in another community our research shows that generally users themselves were able to resolve local conflicts apropos of the community forest. Nonetheless, the assistance of forestry officials in resolving those of smaller magnitude was timely and laudable.

4.1.3 Constitution Preparation

The field data explicitly demonstrates that forest officials, particularly the Rangers, generally drafted CFUG constitutions. This occurred because drafting a constitution requires technical expertise, which the ordinary villagers lack, with the exception of a few cases of well-educated individuals. Hence, the constitution of most of the CFUGs in this study were drafted by the Ranger and presented for deliberation at the general meeting of users. In isolated cases, the CFUG itself drafted the constitution with the technical assistance of the Ranger.

There was a general trend to approve the drafted constitution by holding a general users meeting. Generally, after discussion and deliberations, a consensus was reached and the constitution was approved. When asked what the constitution contains, responses provided include:

¹ A VDC is the lowest level of administrative and political unit which is divided into nine wards.

- the embodiment of rules and regulations pertaining to the rights and responsibilities of the forest users;
- an outline of the users committee, its rights and functions as well as its role in controlling illegal activities to protect the community forest; and
- a description of how forests are to be managed and the sanctions imposed on violators of regulations.

Thus, by and large, respondents have a basic knowledge about what a CFUG constitution is. However, study participants ignored the number of user households, failed to estimate the population of the users' groups, estimate the size of operating funds and indicate the names of the office-bearers.

Two additional findings are worth mentioning about the knowledge regarding CFUG constitutions.

- Most women interviewed did not know how constitutions were drawn and what they contain. This lack of knowledge can be attributed to two factors:
 - i. the limited or lack of involvement of women in the preparation of the constitution; and
 - ii. their relatively low level of literacy or formal education.
- Nonetheless, the women in the user committees and a few conscious women knew how constitutions were drawn and had a sense about what their content.

4.1.4 Formation of the Users' Committee

A democratic process is used to form the user committee of a CFUG. Members of this committee are elected and selected during a general meeting of forest users. The names of candidates are proposed in the meeting and then elected according to their capabilities and popularity. Most committee members are consequently selected the same way.

Out of the sixteen CFUGs visited as part of this study, four have user committees where all members are male, ten have one to four women representatives, and two communities have exclusively female user committees. Overall, limited female participation overall in user committees reflects traditional attitudes that confine women to the home and farmlands, despite the growing recognition of women as development partners.

In CFUGs where the user committee is exclusively made up of males, female informants usually did not know how user committees were formed. In CFUGs where user committees are exclusively made up of females, some male informants were unaware that such committee existed.

4.1.5 Forest Management Plan

Of the total sixteen CFUGs studied, only two of the pre-handed over CFUGs do not have forest management plans. As mentioned above, the forest management plan, like the constitution, is drafted by the Ranger and presented in the general meeting of the CFUGs for deliberation. The drafted forest management plan is submitted to the DFOs only after the CFUG members agree to its contents. The forest management plan is a five years' plan for forestry management, containing the modus operandi for sustainable forest use. The forest management plan contains procedures for planting trees and other silvicultural activities such as thinning, pruning, lopping, clearing, and selective harvesting. The village leaders, the active members of the users' committee, and active general users play an instrumental role in finalizing of the management plan. The majority of female informants and some of the male users do not know how the plan is formulated or what it contains, these are study participants that were not involved in drafting and finalizing the plan. The interviewees were generally aware of the basic objectives highlighted in the forest management plan; however they ignored aspects such as how the nursery operates, type of income generation activities implemented, the calendar of activities, indicators for collecting grass or obtaining fodder for animals, cultivation of medicinal herbs, protection of wildlife, penalties for violations and forest production methods.

4.1.6 Process of Handing Over the Forest

An effort was made to investigate if CFUG members and forest users in indigenous communities know the status of handing over national forests to nearby communities. Findings indicate that respondents are aware of the steps needed to have forests handed over to communities, including: the formation of CFUGs, the application to the DFO for assistance, the preparation of the constitution and its submission to the DFO for approval, the preparation of forest management plan and its submission to DFO for approval. Both male and female members of the users' committees and other well informed male users of the community forest are the most knowledgeable about these steps. A large number of female and some general male user informants are not knowledgeable of these issues since: (i) forestry officials do not offer wider dissemination of the community forest principles and (ii) there is low participation in the evolution of community forests in their respective local settings.

Informants in indigenous communities naturally have a lower level of knowledge on the handing over process. Indigenous forest communities are at a disadvantage since forestry officials do not provide them with community mobilisation assistance. They also have relatively low levels of intra-group dynamics which results from the lack of information about the process of approaching the DFO for forest hand over. Only one indigenous community visited had the initiative and willingness to overcome this obstacle.

4.1.7 Post-CFUG Formation Support

Post-CFUG formation support is essential for the implementation of a community forest management plan. Other essential mechanisms for community forest formation are monitoring of the forest management plan, strengthening the forest users' group and ensuring that the users' group is self-sufficient. Post-CFUG formation support services have been provided only to the CFUGs which have been handed over national forests for sustained utilization.

The following are examples of post-CFUG formation support services provided to these communities:

- regular monitoring of the implementation of the forest management plan;
- forestry officials provide tree improvement advice;
- observation tours in successful sites of community forests;
- short training on forest management techniques and silvicultural practices such as nursery, tree plantation, pruning, thinning/clearing, selective harvesting, and book-keeping.

There have been merely two to four trainees per community. This number is low because imparting training to all users is impossible and beyond the capability of existing resources, however has been limited. Trained people are expected to disseminate their knowledge on forest management to other users. As mentioned above, the majority of women and some male users ignore support provided once CFUGs are formed.

4.2 Behaviour

4.2.1 Distribution of Benefits in the Community

Benefits from forest products have been distributed both among individual households and on communities. Members of CFUGs and indigenous communities are entitled to harvest the forest for fuelwood, grass/fodder, leaf litter, green leaves, *Khar* (thatching materials), timber and medicinal plants to meet their household requirements. Generally the user households have to pay a nominal charge for fuelwood, grass/fodder, thatching materials and timber. The products that are exempt from the nominal charge are leaf litter, green leaves and medicinal plants. There is no disparity in having access to such benefits to satisfy household requirements. Access to these benefits is possible by obtaining a 'permit' from the users committee. This has been established so that forest utilization of the forest is done sustainably.

Profits generated from the sale of forest products and fines collected from violators, have been deposited in bank accounts. In some cases, a substantial portion of these profits is invested in community development activities, creating additional benefits for community members. In this context, it is worth mentioning two illustrative cases. In Gigara, a post-hand over community of the Banke district, the income earned from forest products and fines has been used as follows: Rs. 80,000

has been spent for establishing a school; Rs. 10,000 for the construction of a bridge; Rs. 1,000 for the local Youth Club and Rs. 24,000 for supplying electricity to the village. The users of the Laliguras in the Salyan district have constructed a *Chautari* (community resting place) using Rs. 10,000 from the CFUG's fund. In addition, the users' committee can provide credit to CFUG members for up to Rs. 500, at 24 percent annual interest.

4.2.2 Financial Management Systems

Most of the post-hand over communities have maintained their accounts properly, this is most likely the impact of a short 3 - 4 day training facilitated by the district forestry officials. The accounts of such communities have been maintained by a treasurer, secretary, chairman and appointed office secretary/accountant (not only by the treasurer in all the communities). The post-hand over communities opened accounts in the nearest banks, with the provision that the deposited money can only be drawn with the joint signatures of the chairman and treasurer, secretary or appointed accountant. The more organized book-keeping is most common in those communities where forest products are more profitable. For example, CFUGs in the Gigara Banke district where income from forest products is high, a secretary was appointed to properly maintain accounts, including records of income and expenditures. The secretary is paid Rs. 1,400 per month for the services rendered to the CFUGs.

On the other hand, post-hand over communities that do not have high income and no training have maintained poor financial records. For example, Takiyapur, a post-hand over CFUG has maintained poor financial records. There was no systematic record keeping for income and expenditure. Informants attributed it to lack of training. Pre-hand over CFUGs are not the legal entities and therefore none of them has opened a bank account. One of the pre-hand over CFUGs studied (Jan Ekta CFUG of Banke) has opened a bank account and appointed a secretary to maintain the office records and accounts.

The indigenous forest management systems have not systematically maintained financial records either. Nonetheless, they have tried to maintain the records their own way showing income and recurrent expenditures. Yet, everything is out of order - there are no separate columns or entries for income and recurrent expenditures.

The CFUGs accounts are audited by a person designated by the user group and the user group submits a copy of the report to the concerned District Forest Office.

4.2.3 Participatory Planning

Since forests are best protected through the concerted effort of all community members, any activity for sustained utilization and conservation of forests must be planned in a participatory manner. User committees intending to complete any activity (e.g., nursery management, plantation, running,

clearing, harvesting and other protective measures), informs all users households to make pertinent decisions for decision-making. This participatory approach is found to have been practiced both in CFUGs as well as in indigenous forest management communities. The dissemination of participatory planning information is usually done by the Ranger for the members of CFUGs.

4.2.4 CFUG Networking

The objective of CFUG networking is to create an environment where members of the CFUGs can exchange their concerns and solutions to problems through the formation of a district level CFUG federation. This is usually facilitated by Rangers or forestry officials. Networking is practiced among the post-hand over CFUGs. Of the total eight CFUGs studied, those in Paluthan and Laligurans of the Dang and Salyan districts respectively reported that they have established a relationship with the district CFUG federation. CFUG networks permit the exchange of views and ideas among members in order to successfully solve common problems such as conflicts and those arising from silvicultural practices.

4.3 **Attitude Towards the Services of the Forestry Officials**

The study has also made an effort to assess the attitude towards the forestry officials' services. By and large, most of the informants interviewed reported that they have had a positive experience with the services that forestry officials render. This positive perception can be attributed to:

- assistance in conflict resolution;
- assistance in the preparation of a constitution and forest management plan;
- provision of grants for nursery expansion;
- facilitation of short forest management skills training (such as pruning, thinning/clearing, and selective harvesting);
- management of observation tours for the CFUG members and committee members to the sites where community forestry has been successful;
- training members in financial management systems (mainly the book-keeping);
- provision of the armed guard when required for forest protection (such as in Paluthan of Dang); and
- regular supervision, follow-up, and monitoring of the program.

Some informants from indigenous communities also expressed their affinity towards officials, given they have encouraged indigenous communities to initiate community forestry in their areas.

4.4 Factors Contributing to the Success of CFUG

The informants have identified a myriad of factors that contributed to the successful implementation of community forestry:

- strong unity among users for a common goal;
- adequate technical and administrative support from the forestry officials;
- provision of adult literacy classes (for consciousness building);
- community sense of ownership and the collective responsibility for the control of prohibited activities;
- people's awareness towards the community forest;
- strict adherence to community forest rules and regulations;
- timely resolution of conflict and
- the "felt need" of the forest.

4.5 Barriers for the Implementation of Community Forest

The following list shows the number of barriers identified during the implementation of community forests which comprise:

- disunity among the CFUG members;
- violation of the community forest rules and regulations;
- lack of forest management skills among the CFUG members;
- users' ignorance about community forest policies, rules and regulations;
- illegal exploitation of forests by neighbouring communities;
- deliberate cattle grazing by both CFUG members and outsiders;
- theft of forest products by both CFUG members and outsiders;
- tendency to maximise one's own personal interests (e.g. users' committee members of the Gigara CFUG have demanded emolument for the voluntary services they render) and

- anti-social behaviours (e.g. the drunkards who uprooted the planted saplings in Takiyapur of Dang).

4.6 Non-membership

An effort has also been made to ferret out the *raison d'etre* of not joining a CFUG while a person's household is within the CFUG community. A number of reasons have been ferreted out which consist of:

- absence of the person during the CFUG formation stage;
- lack of invitation or interest to join the group;
- poverty (e.g. in Takiyapur of Dang, one has to pay Rs. 1,000 to join the group and in Mahila Upkar of Banke, one has to pay Rs. 2,000 which cannot be paid by the poor person. In addition to that entry fee, one has to pay a monthly salary for the forest guard.) and
- people meeting the requirements of forest products within their private land (e.g., a 49 year old woman from the Takiyapur CFUG area has planted many trees in her small patch of private land where she meets her household requirements.).

5.0 FOREST POLICIES, RULES AND REGULATIONS

This chapter briefly presents a discussion on the knowledge of community forest policies, soil conservation policy, rights and responsibilities of users' groups, rights and responsibilities of users' committees, rights and responsibilities of the local forestry officials, extension services and materials, etc. Also provided hereunder is the discussion of the behaviour vis-a-vis existing practices of forest protection and conservation, the attitude towards forest policies, rules and regulations.

5.1 Knowledge

5.1.1 Community Forest Policy

The majority of male and some of the female forest user informants interviewed are acquainted with the government's community forestry policies. Lack of acquaintance with these policies is by and large more common among female than among male informants.

Knowledgeable user informants reported that the government community forest policy view the local users as 'protectors' and 'managers' of forests. In other words, they believe that forest policies underscore the protection, conservation and management of forests through the participation of the local communities. They further reported that the policy's intent of handing over the forests to the local users is to encourage their sustained utilization. The community forest policy encourages local users to protect the forest as their own collective property.

The interviews also revealed that the government introduced the community forestry policy after experiencing the lessons learned from past forestry policies which contributed to massive deforestation. It is believed by respondents that the failure to implement sound policies and the deforestation of these areas is a direct result of the non-participatory approach adopted by community forestry policy. The government recognizes the fact that it can not protect the forest.

In the Terai, the hill migrants are more knowledgeable about the community forest policy than the natives. For example, the migrant settlers (Brahmins and Chhetris) have more knowledge on community forest policy than the native Tharus; a function of the pervasiveness of community forestry activities in the Hills.

Thus, even though knowledgeable informants can not spell out the details of the community forest policy, they have fairly understood the essence or philosophy of the community forest policy as portrayed above.

5.1.2 Soil Conservation Policy

An effort has also been made to ascertain the knowledge of user informants on soil conservation policy. Almost all the informants of both sexes interviewed reported that they do not have any knowledge on the current government's soil conservation policy. Even though the recently established district soil conservation offices have initiated work in a participatory fashion in limited areas where soil erosion and land degradation are most serious, they have not been able to expand their services on larger scale.

Despite the lack of knowledge on soil conservation policy, a group of women of Gai Gaureni pre-hand over CFUG of the Salyan district reported that the District Agriculture Development Office conducted an initial short training in soil conservation measures. This group subsequently planted banana trees on the sides of their respective farmlands. Some informants of both sexes demonstrated their awareness of soil erosion problems due to inundation and identified the solution which requires trees planted on the river side.

The users of Sarvodaya pre-hand over CFUG of the Dang district have already done some soil conservation activities, such as the preparation of river embankment and construction of retaining walls for the protection of the soil. Some informants in Paleban in Pyuthan district reported that they are aware of the importance of the soil conservation such as tree planting for controlling the landslide.

These details clearly demonstrate that even though the local people are unaware of the government's soil conservation policy, they are aware of the factors of soil erosion and land degradation and also know measures they must take to prevent them.

5.1.3 Rights and Responsibilities of the Users Group

The rights and responsibilities of user groups fall under the forest rules and regulations. An effort has been made to determine the extent of knowledge that users' groups have about their rights and responsibilities. Almost all the user informants of both sexes know their rights and responsibilities. They unanimously expressed that their right is to enjoy the available forest products to meet their household requirements. Similarly, their responsibility is to protect the forest, establish nurseries, plant trees, participate in the activities organised by the user's committees, provide regular salaries to the forest guards, follow the government community forest policies, rules and regulations, extinguish the forest fires, and prevent grazing within the forest.

5.1.4 Rights and Responsibilities of the Users Committee

These rights and responsibilities of the users committee also falls within the purview of forest rules and regulations. Most members of executive committees, male and female, know these issues. Similarly, a few female user informants and more than half of the male informants are found to be equally knowledgeable. Knowledgeable informants reported that the right of a user committee is to mete out punishments to violators of local norms, rules and regulations established by the community forest management plan. However, this committee can arrest and penalize individuals who illegally

cut branches off the trees, uproot planted trees, illegally extract fodder/grass, timber and fuelwood, etc. Its responsibility is to call meetings of users on a regular basis, arrange training for both committee members and forest users, persuade users to abide by the CFUG constitution, make users participate in reforestation, pruning, thinning and clearing/weeding activities. The users committee is also responsible for contacting forestry officials for the necessary services, maintain book-keeping and official documents and give forest product permits to users. Basically, the major responsibility of the users committee is to manage the forest by implementing the forest management plan.

5.1.5 Right and Responsibility of the Local Forestry Officials

The members of the executive committee (of both sexes) and more than half of the male user informants and a few active female user informants are acquainted with rights and responsibilities of local forestry officials. Local forestry officials, particularly the District Forest Officers have the authority to resume the forest if the user group has substantially damaged the environment or failed to comply with the Forest Act (1993). These informants also reported that the DFO can penalize anyone within the users committee or other members who violate the Forest Act and forest rules and regulations. The responsibility of the forestry official is to assist and monitor the implementation of the forest management plan; follow-up on CFUG activities; provide regular support to the CFUG (including financial, silvicultural and legal knowledge on community forestry by imparting training to the CFUGs) and arrange tours for members of user committees and CFUGs.

5.1.6 Extension Services and Materials

It was difficult to generate information on extension services and materials since only a few user informants, of two post-hand over communities, namely Gigara and Mahila Upkar, talked about forest extension services, yet did not say a word about the materials. The user informants commented on forest extension services including: follow-ups; monitoring and revision of the CFUG forest management plan; training on forest management skills including harvesting; administration, financial management systems and book-keeping; and participatory planning. In fact, the user informants of other post-hand over communities also reported the same post-CFUG supports services as above, however they define support services as extension services. The user informants of all the CFUGs and indigenous forest management communities reported that they have not received materials (posters, leaflets, booklets, etc.) of the community forest, its policies, rules and regulations, soil conservation policies or any other related activities.

5.2 Existing Behavioural Practice of Forest Conservation

The post-hand over CFUGs have been managing their forests pursuant to their management plans. That is, by exploiting the forest products sustainably as specified in the plan. The universal practice for the protection of forests is through the appointment of *Chaukidars* (forest guards). The *Chaukidars* are usually paid in cash, except for in some systems in which they volunteered their services. The *Chaukidars* regularly patrol the forest, arrest the offenders of the CFUG rules for the users' committee to: determine a punishment; seize the illegally extracted forest products and return

the stolen goods to the committee (which is normally auctioned or sold); drive away the illegally grazing livestock; and to alert the users' committee and CFUG if the forest is caught by the fire, etc. The general rule is to collect a small amount of cash from each user household at the end of the month for the payment of the forest guard's emolument. In some of the communities, it is collected by the *Chaukidar* himself and in others, the secretary or treasurer collects it. In some cases, the money is collected on a specified day of the month on which a general meeting of the users is held for the discussion on the forest management and planning. The *Chaukidars* are appointed by the users' committee in consultation with other CFUG members also. They have to be physically strong and sincere to discharge their onerous protective responsibilities. The employment of *Chaukidars* for forest conservation and protection by the CFUGs indicates that people are willing to conserve the forest with their own efforts and resources. This is by far a great revolution for the development and sustained utilization of the forests.

5.3 Attitude Towards Forest Policies, Rules and Regulations

By and large, user informants of both sexes have had a positive attitude towards the forest policies, rules and regulations. The reason of having the positive attitude is that all of them recognize the local people as protectors and managers of forest resource. In other words, they have created an environment for increased protection, management and sustained utilization of the forest through the involvement of beneficiary communities. However, there were a few user informants of both sexes who could not say anything about their attitude or view towards the policies, rules and regulations.

6.0 FOREST MANAGEMENT SKILLS AND BEHAVIOUR

This chapter briefly presents a discussion on the knowledge and behaviour of user informants regarding timber and non-timber forest product management.

6.1 Knowledge on Timber Management

The level of knowledge on timber management varies among the user informants of the pre-and-post hand over CFUGs and indigenous forest management communities. The user informants of the post-hand over communities have a relatively greater degree of knowledge than the pre-hand over CFUGs. This is attributable to the greater degree of efforts made by the Rangers and forestry officials to provide short training to the general users and members of the committee of both sexes. They have the knowledge on pruning, thinning, clearing and selective harvesting. The user informants are experienced in pruning the multiple stems to allow a single stem to dominate for the quality timber development. They are also knowledgeable of pruning the lower branches to produce a clear tree bole with few knots for quality timber. Similarly, they maintain that thinning is required for removing trees with inferior form and slower growth rates to allow other healthy plants to grow faster. Analogously, they also know to clear the fallen branches and trees from the forest to allow for continued growth. Selective harvesting is required for sustainable forest development, which requires that old, dead, fallen and dying trees should be cut down for timber, leaving the young and healthy trees for future use.

Although a few women of the users' committee are more familiar with silvicultural practices, most female and male user informants lack this knowledge. The members of users committee have, in addition to the training, more contact and discussion with the Rangers about timber management practices. The general practice prevailing in the communities is that a few members, both male and female, are given a short training on the silvicultural practices with the assumption that they would disseminate their knowledge to other interested members once they are back in their respective communities. This strategy is used since providing training to all the users would be difficult due to limited resources and manpower constraints. Training is one of the major components of the post-CFUG formation support, mostly imparted to the members of handed-over communities. Nonetheless, it was ascertained that silvicultural training was imparted to a few pre-hand over communities but still members of all pre-hand over CFUGs do not have knowledge on silvicultural practices. In the case of indigenous forest management communities, there is no silvicultural training imparted to the users. Despite this fact, a few male members have limited knowledge on plantation, weeding and pruning which they have gained through observation in nearby communities.

6.2 Behaviour on Timber Management

The timber management activities carried out by CFUG users and indigenous forest management systems vary depending on the types or stages of community managed forestry. For example, the users of post-hand over CFUG at Paluthan do not practice pruning and thinning because their forest is already mature. Instead they practice selective timber harvesting. Moreover, members of the Gigara post-hand over communities engage in pruning, thinning and selective harvesting. The Mahila Upkar CFUG divides the forest into five blocks for rotational pruning, thinning and selective timber harvesting. Conversely, the users of the Takiyapur CFUG do not practice any of these silvicultural activities, despite that, these techniques are known by a few male members of the executive committee. The users of Sidha Gufa practice plantation, thinning and selective timber harvesting. Users at the Bukenidada CFUG only clear forests. Other common silvicultural activities are not practiced since the forest is quite young. The users of the Laliguras CFUG divide the forest into four plots for yearly rotational pruning, thinning, and selective harvesting. And finally, the users of the Paleban CFUG have established a sample plot for forest management practices such as pruning, lopping, thinning and selective timber harvesting.

The field data indicate that some of the pre-hand over CFUGs practice scientific silvicultural activities and some do not. For instance, the users of the Rimna CFUG have not been trained in silvicultural activities such as pruning, thinning and selective harvesting, thus they do not carry out these practices. The users of the Jan Ekta pre-hand over CFUG divided the forest into five different blocks for rotational pruning, lopping, thinning and selective timber harvesting, particularly the Sisso. The users of Sarvodaya CFUG do not practice the scientific silvicultural activities because their operational plan has not been finalized and they are hoping to learn such activities after the forest is handed over. Similarly, the users of the Gai Gaureni are not practicing the aforementioned activities at the moment, because the forest is not handed over to them and they have not had contact with the forest official or Ranger. On the other hand, the users of Krishna Himali practice the silvicultural activities because the Ranger has provided training to a few users. The users of Ghorthapa and Newarban do not practice silvicultural activities because of the lack of training. Last year, the user informants of Chaurighat CFUG weeded the planted areas.

There is virtually very little practice of scientific silvicultural activities in the indigenous forest management systems, primarily due to the lack of training and interaction with the forestry officials. The user informants of the Sete Khola indigenous forest management system reported that it is common to clear the inferior or weak plant species and prune tree branches. The users of CFUGs and indigenous forest management systems who do not have scientific forest management skills must obtain a permit to exploit forest resources.

6.3 Attitude Towards Forestry Officials

Members of the CFUGs who have received forest management training and skills attain a positive attitude towards the forestry officials, because their services has helped them manage and exploit timber in a sustainable manner. Previously, when the members and users lacked the forest management skills, they harvested timber haphazardly. Many of them were unaware of and had not practiced selective timber harvesting. The users who did not receive any technical training on timber

management skills had no opinion about the forestry officials, but would like to be trained in those skills, as soon as possible.

6.4 Knowledge on Non-Timber Forest Product Management

User informants of both sexes of some CFUGs reported that they are aware of the availability of a limited number of medicinal plants such as the *Harro* (used for curing cough), *Kanchirna* (used for curing animal's liver), *Hadchura* (used for treating the broken bones), *Timor* (used for treating stomach aches and colds), *Amala* (used for curing cold) and *Pakhenbed* (used for curing diarrhoea and dysentery). Though these products are harvested once a year, the users have not been trained in the scientific skills for sustainable exploitation, with the exception of two women. These two women of the Jan Ekta CFUG in the Banke district were recently offered the opportunity to participate in a training on medicinal plants, organised by the District Forest Office.

In all types of CFUGs and indigenous forest management systems, users have been found to be experienced in the selective harvesting of fuelwood. This ubiquitously known system indicates that users are moving towards sustainable exploitation of forests. The users know that the users' committee imposes fines on the illegal feller of live trees for fuelwood. Fodder, *Khar* (thatching materials) and other plants such as *Rasulla* are other non-timber forest products that are useful for initiating their systems.

User informants are quite aware of the indirect benefits of forestry management. For instance, user informants were aware that conserving and planting trees is elemental in controlling soil erosion preventing landslides.

6.5 Behaviour on Non-Timber Forest Product Management

In practice, users lack the necessary training, and thus do not practice the sustainable exploitation of medicinal plants. They exploit the medicinal plants haphazardly in order to meet their own household requirements and periodic cash income needs. Despite this, users of all pre-hand over, post-hand over CFUGs and indigenous forest management systems have nurtured and established a system of selective harvesting of fuelwood. The users' committee gives the users permits to collect only pruned stems, branches, dying, dead, and fallen trees, branches, or twigs for fuelwood. Fodder and *Khar* are sustainably exploited by the users. The roots of grass and trees of fodder *khar* are not uprooted and destroyed, since they are needed every year to meet their requirements.

6.6 Attitude Towards Forestry Officials

Since the forestry officials do not focus on training for non-timber forest product management, (except for fuelwood) they have no opinion on the forestry officials. However, they have expressed their interest in having training inputs as early as possible.

7.0 RECOMMENDATIONS ON THEMATIC PRIORITIES FOR VIDEO PRODUCTION

The field observation and the subsequent analysis of qualitative data in the preceding chapters amply demonstrate that all users of community forests and indigenous forest management systems do not have extensive knowledge on the community forest and soil conservation policies, forest rules and regulations, technical skills in forest management and group process. Hence, uneducated user informants have not been able to sustainably utilize the forest, a consequence of the following factors such as: illiteracy; poverty; lack of exposure to the outside successful CFUGs; lack of wider dissemination of community forest and soil conservation policies; forest rules and regulations; lack of training opportunities for the forest management and lack of access to audio visual opportunities. Therefore, the video production company must focus its work on the issues described in this report for environmental education and communication. For simplicity, the following themes and messages should be incorporated in the video story and have been prioritised hereunder.

- a. Community forest policy (emphasis should be on the factors responsible for past deforestation, its serious consequences, government's response to deforestation in the form of a community forest since 1978, the 1988 Master Plan for Forestry Sector's emphasis on key policies related to community forest, etc. as explained in Chapter 1, and 4).
- b. Soil conservation policy (focus on environmental education as explained in Chapter 2).
- c. The 1993 Forest Act (vis-a-vis the community forest provision which focuses on community forests, formation of users' groups, registration of users' groups, users' groups as a corporate body, handing over of community forests, and resumption of community forests, etc.).
- d. The 1995 Forest Rules and Schedules (focusing on the community forest formation and registration of users' group; operational plan for community forests; maintenance of community forest records; actions prohibited in community forests; collection, sale and distribution of forest products; receipts and records of forest products; hammer mark to be registered; transportation of forest products; operation of users' group fund; resumption of community forest and power to obtain assistance).
- e. The 1995 Operational Guideline for community forestry development programme. The phase-wise role of forestry development staff has to focus on as given below (also indicated in the textual presentation).
- i. Investigation Phase :
 - discussion about community forestry with the local community;

- identification and verification of users and forest area;
- identification of existing community forest management systems;
- ascertaining users' requirements; and
- Assessment of the proposed community forest area.

ii. Negotiation Phase :

- identification of users' requirements, problems, and solutions;
- preparation of the operational plan;
- review of the composition of CFUG;
- approval of the operational plan; and
- handing over the responsibility of managing the community forest.

iii. Implementation Phase :

- assisting the user group in implementing the operational plan;
- monitoring the implementation of the operational plan;
- strengthening the forest user groups by helping resolve conflict, training the users in forestry development, organising study tours, training and workshops, interactions among user groups, encouraging them to form a users' federated association; and
- revision of operational plan.

iv. Review Phase :

- evaluation of the on-going operational plan;
- discussion on the revision of operational plan;
- approval of the operational plan.

- f. Conflict pertaining to forest boundary (emphasizing the mistaken association of ward or VDC boundary with the boundary of the community forests, as explained in chapter 4).
- g. The constitution preparation process (as explained in the text of chapter 4).

The following should be incorporated into the videos to inform people about the contents of the constitution:

- name and address of the users' group;
- objectives of the users' group;
- seal of the users' group;
- full names and addresses of users;
- number of households in the area covered by the users' group;
- estimated population of the users' group;
- functions, duties, and powers of the users' group

- procedure of forming the users' committee;
 - list of names of the office-bearers of the users' committee;
 - working procedure of the users' committee;
 - measures to be adopted to control forest fires;
 - punishment assigned to members of the users' group who act in isolation of the operational plan;
 - formalities to be fulfilled while punishing any member of the users' group;
 - procedure for managing funds, and
 - procedure of auditing the accounts.
- h. Forest management plan² preparation (with due emphasis as explained in Chapter 4). The following contents should be incorporated in the videos to inform people about the contents of the forest management plan or operational plan:
- particulars of the forests, name, boundaries, area, condition, and type;
 - map of the forest;
 - block divisions and their particulars: name, boundaries, areas, aspects, slope, soil, type of forest, main species, useful species, age, and situation with respect to natural vegetation;
 - objectives of forest management;
 - forest protection methods;
 - silvicultural activities; thinning, pruning, cleaning, and other forest promotion silvicultural activities;
 - nursery, tree plantation, income generation activities, and time-schedule;
 - details about areas suitable for cultivation of medicinal herbs, types and species of such herbs, cultivation activities, and time-schedules;
 - process of enforcing penalties upon users; and
 - protection of wildlife.
- i. Factors leading to the easy implementation of the community forest (as explained in Chapter 4).
- ii. Factors hindering the implementation of community forest (as explained in Chapter 4).

² While writing the script, a model forest management plan approved by the DFO can be used as a reference.

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INSTRUMENTS:
**FORMATIVE RESEARCH ON THE ENVIRONMENTAL EDUCATION AND
COMMUNICATION IN FOUR DISTRICTS OF MID-WESTERN NEPAL**

A. Key Informant Interview Guide

1. Background Information

- i. District:
- ii. Name of the Community Forest:
- iii. Name/s of the Village Development Committee where the community forest is located:
- iv. Ward number:
- v. Distance from the motorable road (in km):
- vi. Total area of the community forest in hectare:
- vii. Forest (planted or preserved).

2. Socio-demographic Information

- i. How many households are the general members in this community forest user's group? What is the total population by sex? Are there any non-member households living in this CFUG community? If yes, how many?
- ii. What are the different ethnic/caste groups utilising this community forest? Could you provide us the number of the households of different ethnic/caste groups? Are all these ethnic/caste groups staying here for long or not? If some of them are the recent migrants, could you tell us which ethnic/caste groups?
- iii. What is the literacy status of the general members/users of the community forest? Could you tell us what number/percentage of the males and females utilising the forest are literate? Which ethnic/caste group/s is/are mostly illiterate? Why so?
- iv. How many members are there in the users' committee (executive)? Are they from the same ethnic/caste group or from different ones? If they are from the different ethnic/caste groups, can you give us the information about the number of their representation?
- v. What is the age group of the members of the users committee? Are there any female members in the committee? If no, why no representation? Are the members of the committee socially related to each other?
- vi. What is the literacy level of the members of the users' committee?

- vii. Is/are there other social group/s or club/s working in the village? If yes, what is/are its/their name/s and activities? What is/are its/their history/ies?
- viii. Could you tell us the history of the formation of forest user's group of this area/village?

3. Farming Systems

- i. What is the land use pattern (e.g. forest, agricultural land, pasture/wasteland, etc.) in this area?
- ii. What are the crops grown in the different types of land by seasons?
- iii. Is the village self-sufficient in food production? If not, what number or percentage of people are food deficit households? How do these food-deficit households manage to meet the food requirements (coping strategies)?

4. Other Project History

- i. Is/are there any project/s being implemented in the community? If yes, since when?
- ii. What are its objectives and activities? Which organisation/s has/have implemented it/them?
- iii. Who are the beneficiaries? How many?
- iv. How is/are the project/s implemented? With or without community participation?
- v. Has/have the project/s any impact on the process of community forest management?

B. Group Interview Guide for CFUGs (Both Pre-handover and Post-handover)

1. Community and CFUG Organizational Processes (explore the knowledge, behaviour and attitude)

- i. What is the process of being organized into a CFUG? Could you tell us in detail? If not, why? If you know, how did you work or how are you working to organize into CFUG? [Explore the process of identification of forest users/non-users to include in the CFUG including the roles of forestry officials and local community].
- ii. Was/were any conflict/s regarding the forest boundary and users? If yes, what the group thinks are the reasons for the conflict? Who were/are these conflicting groups by sex and caste/ethnicity? What roles were played by the forestry officials and the community itself to resolve conflicts? What were/are the local mechanisms of resolving the conflicts?
- iii. How was the constitution prepared? How were rules and regulations set? What is the objective of the preparation of constitution? What roles were played by the forestry officials and community itself? Did any problem/s crop up? If yes, how was/were it/they solved? Were you satisfied with the way the constitution was prepared? If yes, why? If not, why? Was the step of the constitution preparation widely known? If not, why? How many people were involved in this step?
- iv. How was the users' committee formed? If yes, could you tell us the formation process (the number of people present, process of the selection/election of the group leaders, involvement of women and disadvantaged groups such as poor/low caste people, consensus, disagreements, etc.)? Were you satisfied with the committee formation process? If yes, why? If not, why?
- v. How was the forest management plan (operational plan) developed/framed? In other words, could you tell us the process of its development/framing (number of people involved in this process by socio-economic level such as sex, literacy level and caste and the process of participation in discussion)? What is the objective of forest management plan? What matters should be included in the operational plan?
- vi. Is the forest actually being managed in accordance with the plan? If yes, how do you distribute and/or invest the income generated through fines, users and commercial sales? For what forest product's sale do you have to pay tax to the government? How do you pay it?

Note : Do not ask the following questions to the pre-handover community.

- vii. Could you tell us in detail how was the forest handed over to the community? Was there any objection by any user? If yes, why?
- viii. Are you getting post CFUG formation support from the forest officials such as follow-up, monitoring, training on the forest management, harvesting, administration, financial management systems, book-keeping, and participatory planning and establishing and institutionalizing group to group network?
- ix. Has the training given by the forestry officials been helpful to manage forest, harvest it, and manage finance and book-keeping? If yes/how? If not, why?
- x. Have you identified any community-based income generating activity/ies? If yes, what is/are it/these? How have you started? Have you started giving benefits? If yes, how are the benefits distributed among the group members? How are the accounts maintained? Do the users know the accounts of the benefits?
- xi. What is your attitude towards the services provided by the forestry officials? Adequate? Inadequate?
- xii. What, in your experience, has made it easier to implement community forest management?
- xiii. What barriers did you have to face in implementing community forestry management?

2. Knowledge and Attitude Regarding Community Forestry Policies, Rules and Regulations and Soil conservation

- i. What explains the government's policy to hand over forests to the communities or the local users (knowledge on the policy)?
- ii. What actions are required by community members to get forests handed over to them?
- iii. What are rights of the users' group in the community forestry? What are the rights of the district forestry officials regarding the community forestry?
- iv. What are responsibilities (duties/obligations) of the community forest users' group? What are the responsibilities of the local forestry officials towards the community forestry?
- v. How is the income derived from the sale of the forest products utilized? For what? Do you have the knowledge of the payment of government taxes after the harvest of the forest products? If yes, are you paying it? For what sort of forest products?

- vi. What extension services and materials which community residents are entitled to from the district forestry office and soil conservation office?
- vii. What is your (users' group) attitude towards the community forestry policies, rules and regulations (views on the adequacy/inadequacy of the policies, rules and regulations)?
- viii. Based on the knowledge of the policies, rules and regulations, what activities did you do in the past? What were the intentions to carry out these activities (behaviour)? What activities are you presently carrying out? And what are your intentions behind carrying out these activities?
- ix. What do you know about the soil conservation policy of the government?

3. Forest Management Technical Skills and Behaviour

a. Timber Management

- i. Do you have nursery in the community? If yes, whose?
- ii. What plantation techniques do you know?
- iii. Do you know to prune/shingle multiple stems to allow a single stem to dominate? If yes, how did you know it? Are you practising this skill? How often?
- iv. Do you know to prune/lop the lower branches to produce a clear tree bole with few knots? If yes, how did you know it? Are you practising this skill to manage timber? How often? What is its objective?
- v. Do you know to thin forests to remove trees with inferior growth/form? If yes, how did you know it? Are you practising this skill? How often?
- vi. Do you also clear fallen branches/trees from the forest floor? If yes, how often?
- vii. Do you have the knowledge on the selective harvesting of timber? If yes, are you practising it?
- viii. If you do not have any of these skills, how are you managing the timber?
- ix. Do you sell timber? If yes, how much income does your group or do you generate every year from the timber sale?

- x. While extracting/exploiting the timber at the present, are you also considering its future availability? If yes, how? If not, why?

b. Non-timber Forest Product Management

- i. What types of medicinal plants are available? How do you collect/exploit these medicinal plants? How often? Do you sell the products of medicinal plants? If yes, in what form? Processed or unprocessed form? Do the collectors have to pay tax to the users' committee and the district forest office? Do you know how to manage the medicinal plants for future benefits also? If yes, how?
- ii. What type of wood do you collect for cooking purpose (fallen or dead wood, lopped/pruned branches twigs, live young trees, etc.)? What are you doing to handle your future fuelwood needs? or How do you plan for your future fuelwood needs?
- iii. How do you extract grasses/forage/fodder from the forest? Do you also think of your future need of grasses/fodder? How in the actual practice?
- iv. Are there other non-timber forest products in addition to the above mentioned ones that are currently being exploited? If yes, what are they? How do you exploit them? For what purpose? Are you also conserving while exploiting them at the present? If yes, how?

4. Soil Conservation and Wasteland Management

- i. What activities did you do at group level in the past for soil conservation? And what activities are you presently doing?
- ii. What activities have been done so far for the wasteland management?

C. Individual Interview Guide for CFUG Members (Both Executive Committee Members and Other Members/Users - Information on Differences of Knowledge, Rights and Responsibilities to be Generated by Age, Gender, Literacy, Group Leaders vs. Group Members)

Note : Questions prepared for the CFUG group interview can also be used to ask the individual members. The objective of conducting the individual interview is to confirm the information generated through group interview.

Preparation of the separate questions on exactly the same themes would be repetitive and hence, the Research Associates and Research Assistants are asked to use the guide questions from (i) community and CFUG organizational processes; (ii) knowledge and attitude regarding community forestry policies, rules and regulations and soil conservation; and (iii) forest management technical skills by modifying them in the relevant context of the individual member. However, the issues/topics for interview are listed here:

1. Community and CFUG Organizational Processes

- i. Knowledge on the process of the identification of forest users/non-users to include in the CFUG and his/her level of involvement.
- ii. Knowledge on the conflicts regarding the forest boundary and users and his/her level of involvement for conflict resolution.
- iii. Knowledge on the process of the preparation of the constitution; its rules and regulations, roles of the local forestry officials and the users and his/her involvement in the process as well as satisfaction/dissatisfaction with the process.
- iv. Knowledge on the formation process of the users' committee and his/her involvement in it.
- v. Knowledge on the forest management plan preparation and its process, roles played by the community and local forestry officials and his/her involvement as well as satisfaction/dissatisfaction with the process.
- vi. Knowledge on the actual management on the forest in accordance with the management plan.

Note: Ask only to the CFUG member where the forest is handed over to the community.

- vii. Knowledge on the process of handing over the forest to the community and his/her involvement in the process.

- viii. Knowledge on the post CFUG formation support from the local forestry officials (see group interview guide question viii) and his/her involvement and views on the impact of the training.
- ix. Experiences on the factors contributing to easy implementation of community forest management.
- x. Experiences on the barriers in implementing your community forest management program.

2. Knowledge and Attitude regarding Community Forestry Policies, Rules and Regulations and soil conservation

- i. Knowledge on the community forestry policy (how does the government intend to develop and manage forest resource).
- ii. Knowledge on the actions to achieve the community forestry hand-over.
- iii. Knowledge on the rights of the users' group in the community forestry and the rights of the district forestry officials.
- iv. Knowledge on the responsibilities (duties/obligations) of the users' group and the responsibilities of the local forestry officials towards the community forest.
- v. Knowledge on the division of income among the users and payment of taxes after harvest of forest products.
- vi. Knowledge on the extension services/materials to be provided by district forest office.
- vii. Knowledge on the soil conservation policy and his/her activities.
- viii. Attitude towards the community forestry policies, rules and regulations and soil conservation policies.

3. Forest Management Technical Skills and Behaviours

Timber Management

- i. Knowledge on pruning the multiple stems and its practice.
- ii. Knowledge on pruning/lopping lower branches and its practice.
- iii. Knowledge of thinning forests and its practice.

- iv. Knowledge on clearing fallen branches/trees from the forest and its practice.
- v. Knowledge on the selective harvesting of timber and its practice.
- vi. Household benefits from the timber of community forest.

4. Non-timber Forest Product Management

- i. Knowledge on the extraction of medicinal plants, and benefits received.
- ii. Types of fuelwood extracted for household consumption and sale (if any).
- iii. Techniques of the extraction of fodder from the forest.
- iv. Knowledge on any other non-timber forest product extraction and its practice.

5. Indirect Benefits

- i. Knowledge on control of soil erosion, landslide, desertification, etc. from the conservation of the community forest.

6. Level of Activity in the CFUG Over Time

- i. Involvement in the types of activity related to forest management.
- ii. Change in activity level in the CFUG over time (if any) and reasons.

7. Soil Conservation

- i. What activities have you done for soil conservation so far ?
- ii. What are the problems/barriers ?

D. Individual Interview Guide for Non-CFUG Members Living In CFUG Community

Note : First, ask a screen question to determine if he/she has ever been a CFUG member. If yes, then ask similar Knowledge, Attitude and Behaviour (KAB) issues for topics (policy/rules, technical skills, group process) as for CFUG group interview and CFUG member interview guide, preferably the later guide. But add the following questions:

- i. Why are you no longer a member (or active member) of the CFUG? What was your own level of activity in the CFUG over time. What types of activities were you involved in?
- ii. What had your household received in the past from the CFUG? Which forest products? Money? Other benefits: direct or indirect?

If no, then ask the KAB questions on policy and technical skills only (but not the organizational processes) from the CFUG member interview guide. But add the following questions.

- a. Do you participate in other types of the groups in the community? If yes, what sort of groups are these?
- b. What are your reasons for not participating in the CFUG?

E. Indigenous Forest Management (IFM) Group Interview Guide

1. Background Information

- i. District:
- ii. Name of the Forest:
- iii. Village Development Committee where the forest is located:
- iv. Ward number:
- v. Total forest area in hectare:

2. Socio-demography

- i. How many households are currently using this forest as members? What is the total population by sex?
- ii. How many males and females are literate?
- iii. What are the caste/ethnic groups living in this area? (Find out the distribution of the households by caste/ethnicity)
- iv. Who are community leaders by caste/ethnicity?

3. Historical Information

- i. When was the group formed? How many members? How were they selected?
- ii. When did you begin the indigenous forest management?
- iii. Could you provide the history of group work in this community?

4. Forest Management

- i. Which forest products do you remove?
- ii. What do you do to ensure that you have a continuous supply of these forest products over time?
- iii. Which forest products do you sell in- processed or unprocessed form?
- iv. What are the reasons for not registering as a CFUG and working with the government to get handover of your community forest?

5. Knowledge

- i. What is the CFUG handover process?
- ii. What are the community forestry rules and regulations?
- iii. What are the your rights and responsibilities of the users group as per the forest policy?
- iv. What skills do you have to manage your forest in the way that the government requires?

6. Behaviour

- i. What are the difficulties for group organization?
- ii. Are there internal group conflicts? If yes, what sort? How can they be solved?
- iii. Are there problems for the group regarding the distribution of benefits?

7. Attitudes

- i. What is your attitude towards the government community forestry policy and soil conservation policy?
- ii. What is your view towards the government services for the forest management and soil conservation?
- iii. What is your view regarding the roles played by DFO and his staff?
- iv. What type of advice about forest management would you like to get?

F. Indigenous Forest Management (IFM) Individual Member Interview Guide

Note : Except the background information, the socio-demographic information and historical information, ask all the questions of forest management, knowledge, behaviour and attitude. But following questions have also to be added:

- i. What has your household received from the group's IFM?
- ii. What has your level of activity been over time? What types of group activities?
- iii. If your level of activity has changed over time, why so?

APPENDIX - 1: HAND OVER CFUGs

1.0 GIGARA COMMUNITY FOREST USERS' GROUP, BANKE (POST - HAND OVER)

Gigara Community Forest User Group (CFUG) is in ward number two of Udrapur Village Development Committee (VDC) which is almost 500 metres south to the Gularia-Nepalgunj Highway. It has a forest area of 134 hectares which has had the trees planted by the Youth Organization under the Terai Community Forest Project during the period of 1985-89. The forest was left unprotected after the completion of its plantation. Hence, a large number of the people of vicinity indiscriminately exploited the planted forest during the 1990 popular movement for the restoration of multiparty democracy (opportunistic exploitation of forest). As a consequence, a few local people took initiative for the forest protection. There is a total of 276 households as the general members of the CFUG with a total population of 875 (of which 50% are males and 50% females). The predominant ethnic groups are the Newars, Brahmins, Chhetris, Tharus and Muslims. The Tharus and Muslims are the oldest inhabitants whereas the Brahmins, Chhetris and Newars are the migrants from the hill districts. Fifty percent of the population is reported to be literate (mainly the hill migrants) and the literacy rate of the women is extremely negligible. Except 55 landless households, other households predominantly practice agriculture as their principal occupation. They grow paddy, wheat, lentil and sugarcane. About 25 percent agricultural households are food-deficit which supplement their income by working as agricultural and non-agricultural labourers. The landless households eke out their livelihood by working as labourers. There is not any developmental activity launched so far.

As indicated in the preceding paragraph, it was the local people who themselves took the initiative for the forest protection. It was reported that two village leaders of Newar ethnicity seriously took the issue of forest protection in 1991 and they, together with other few local people, started imposing the restrictions on the collection of Khar (imparata) and established a system of issuing Purji (permit) for its collection. This initiative created an awareness among the people that if forest is systematically managed, some income can be generated and local people started thinking about the forest conservation. As a result, the local users of the forest constituted a "forest protection committee" which consisted of 11 members. Having done this much, they approached the District Forest Officer (DFO) for furnishing the information concerning what they had done so far and asking for suggestions to maintain continuity of the conservation activity. The DFO suggested them to form the Community Forest User Group (CFUG). Then, in accordance with the suggestion of DFO, they formed the user group of 276 households of the ward number two of Udrapur VDC by calling a general meeting which was also participated in by the Ranger. At the same time, a constitution was drafted in 1993 with the technical inputs of the Ranger. Having done all this, the users applied to the DFO for further action. Currently, there are 17 members in the executive committee of which four are females.

In 1993, when the households of ward number two were identified as the only forest users, the people of other adjoining wards claimed that the forest also belonged to them and hence, wanted to continue to enjoy the forest products. But two leaders of the community had read the Forest Act (1993) and

they visited the DFO for the further consultation. Finally, they came to know that forest belongs to the community/communities which is/are adjoining it. This was explained to the claimants of the adjoining wards and thereafter, the conflict did not arise any more regarding the forest use. However, a rich villager filed a petition in the district court claiming that about 2 *Bighas* (One *Bigha* is equivalent to .68) of his land was included in the forest boundary which was later returned to him.

Most of the male user informants are knowledgeable about what does the constitution contain. They reported that it contains the laws or rules and regulations pertaining to the rights and responsibilities of the forest users. Analogously, they are of the opinion that the forest management plan contains the provisions apropos of plantation of saplings, protection measures, harvesting techniques, etc. But female user informants of both group and individual household interviews reported that they do not have any knowledge on the modes of the preparation of the constitution and forest management plan -- a consequence of their non-involvement during the period of their preparations. Female informants reported that women have been involved in the executive committee only six months ago and prior to that, their participation in the decision-making was virtually nil. The forest was handed over one and half years ago.

Currently, the users are managing their forests according to their management plan. They have employed two paid forest guards (the senior one is paid Rs. 1,200 and the junior one is paid Rs. 1,000 per month) who regularly patrol the forest for the protection. The CFUG member can collect grass from May to August free of cost. However, people who are non-CFUG members must pay Rs. 2 per bundle (about 40 kg. can be carried by a person on the back). Fuelwood collection is done in December and January for 5-7 days and each collector (both CFUG member and non-member) has to pay Rs. 20-25 per Bhari (a bundle of about 40 kg.). Similarly, Khar (imparata) can be collected in October and November for which the collector (both member and non-member) has to pay Rs. 15 per Bhari. Thus, the CFUG has been earning income from the forest products. It has been revealed that such income is used for multifarious constructive activities (such as Rs. 80,000 has been spent for establishing a school, Rs.10,000 for the construction of the bridge, Rs.1,000 for a local Youth Club and Rs.2,400 for linking the electricity to the village). Likewise, the executive committee can provide credit facility to CFUG member up to Rs.500 with the annual interest of 24 percent. There is an office secretary who maintains the accounts/book keeping. He is paid Rs.1,400 per month. Altogether 12 user informants (including three females) have already had the opportunity for training, observation tours and participation in the workshop vis-a vis community forest. Users attitude towards the forestry officials seems positive because of the multitude of services rendered as described above.

Both male and female user informants reported that community forest is the consequence of the past experience of forest destruction (when it was being controlled by the state). They are of the view that the existing forest policy underscores the protection, conservation and management of forest through the participation of the community. Notwithstanding this fact, they are unaware of the soil conservation policy. They also reported that the right of the CFUG members is to enjoy available forest products and the responsibility is to protect the forest. The responsibilities of the forestry officials are to monitor/follow-up the CFUG and train people for the scientific forest management.

Male user informants have more knowledge on the silvicultural activities (such as pruning, thinning, and selective harvesting) than the females (which is attributable to the less exposure to these activities for the females). But every user committee member knows the pruning technique. These committee members teach other CFUG members about the pruning techniques. These pruning, thinning and selective harvesting (collection of dead, dying and decayed wood) techniques have been practiced. One male and one female participant of the group interviews had also participated in a training on the minor forest products conducted by CARE Nepal. Barring a few, users have no knowledge about the medicinal plants and their techniques of exploitation. Unity among the users, interest for the conservation and support from the forest office are the factors contributing to the easy implementation of the community forest. Lack of mutual understanding and lack of communication among the users, theft of forest products, deliberate leaving of the livestock in the forest for grazing, etc. are the barriers for the effective implementation.

2. MAHILA UPKAR COMMUNITY FOREST USERS' GROUP, BANKE (POST-HAND OVER)

This Mahila Upkar (literally women's welfare) Community Forest Users' Group (CFUG) is in ward number four (Rohini village) of Kohalpur Village Development Committee (VDC). It is approximately three kilometers away from the all-weather motorable road. The total area of the forest is 25.6 hectares. It is a conserved forest but enrichment plantations are often done once in a rainy season. The forest has been conserved since August, 1996. The total number of user households is 63 with a total population of 483 of which 250 are females and 233 are males. There are altogether 40 non-user households of ward number five of the same VDC. They are mostly the Tharus (the autochthonous people) who do not know anything regarding CFUG and they feel that there will be more wild animals if forest is protected. The community consists of mainly the Brahmins/ Chhetris, Magars, Kamis and Damais. The Brahmins and Chhetris account more than 65 percent of the total population. There is an executive committee of 9 female member of the CFUG. Five males have been designated as the advisors to the committee. Most of them work in Women's Welfare Forum. This forum is set up by women to start "saving fund" of the women and invest its money in terms of loan to its members. Many institutions such as Save Nepal and UNICEF have helped it financially and technically to uplift the existing condition of the women of this forum. One member had got an opportunity to learn about how community approach works in agriculture and forestry sectors in Bangladesh which, eventually, helped the CFUG to work successfully. Agriculture is the predominantly practiced economic activity supplemented by livestock-raising (mainly buffalo and goat-raising). Major crops grown are paddy, wheat, legumes and vegetables. Department of irrigation has constructed an irrigation canal with the cash and labour contribution of the local people but it is not working satisfactorily.

Women's Welfare Forum provided them an impetus to work unitedly for the development. Some of the women of this CFUG are also involved in the conservation of Forest in Srijana Community Forest Users' group. These women discussed among themselves to set up a new and separate community forest by female members only. Then, a general meeting of the active users of forest and a Ranger was organized which was participated in by female representatives of 38 households. Now the households have been increased to 63 because of the motivation created by their work. This general meeting with the participation of the Ranger has resulted in the formation of CFUG. Some conflicts regarding the foot-trail and the right to use the forest were raised by inhabitants of ward number five of the same VDC. It was later resolved by the Ranger by convincing them and providing an alternative foot-trail to them. Then, they applied to District Forest Office for the registration. The Ranger helped the community by providing the draft of the constitution which outlined the rules and regulations (mainly sanctions and fines) for the management of forest. Subsequently, people gathered in a meeting, discussed the drafted constitution extensively and it was approved consensually. However, most of the users except few executive members do not have a detail knowledge about the rules and regulations set in the constitutions and the process of handing over. The nine women of the executive committee and its five male advisors were elected unanimously from among the forest users. At the beginning of CFUG formation, Rs. 200 had been collected from each user

household as membership fee and later it was gradually reduced to Rs. 20 and Rs. 10 because of the sufficiency of money in the CFUG fund. The forest management plan was drafted by the Ranger at the general meeting of the users which was also approved by them after the extensive discussions. The Ranger has, thus, helped in the preparation of the constitution, mapping and surveying of CFUG area and the preparation of the management plan. The forest is being managed by establishing a plant nursery. Nursery has been protected by gabion wires and two members of the users' group supply water daily to plant seeds. Two forest guards have also been appointed to take care of forest.

Animals are strictly prohibited to enter inside the forest. The forest is in degraded condition and hence, none of the forest products except the grass are being extracted at the moment. Grass can be extracted from the forest only by paying money to the committee. Thus, the community is aware of the fact that identification of the users' group, application to District Forest Officer (DFO) for registration, preparation of the constitution and management plan and their submission to the DFO are the sequential steps of the processes of community forestry handover. However, most of the general users do not have knowledge about forest management plan. The CFUG has received post-handover support such as 3 days' training on minor forest products, assurance of providing cash amounting Rs. 25,000 for nursery expansion, agricultural tools and frequent visits of the forest officials, provision of the opportunity of the observation tours in other districts, etc. The forest was formally handed over by the DFO on 23rd March 1997 (when the field work was going on).

Users have divided the forest into five blocks. Since the forest is in degraded condition, no silvicultural activities such as pruning, lopping and thinning are being practiced for timber management. They harvest only the decayed, dead and dying trees for fuelwood purpose. The money collected from extracting grass is deposited in the CFUG's fund and is used for buying seedlings and for paying the salary to the forest guards. The committee has appointed one Office Accountant to keep office records and discharge any other financial activities. The community has placed good attitude towards the forestry officials for providing different kinds of services mentioned above. Almost all users know about different kinds of medicinal plants such as *Kurilo*, *Harrow-Barrow*, *Amala* and *Pipla* in CFUG's forest. But none of these have been exploited due to their limited availability.

Members of the CFUG have the knowledge of government community forest policy which recognizes users as protectors and managers. The users' do not have knowledge of soil conservation policy. However, some male informants of the household of users know soil conservation policy. They are of the view that soil can be protected by the villagers by planting trees, banana and bamboo on the bank of river and terraced land. They have positive attitude towards government forest policies, rules and regulations because they have created an ambience for the better management and utilization of the forest products.

3.0 PALEBAN COMMUNITY FOREST USERS' GROUP, PYUTHAN (POST-HAND OVER)

This Paleban Community Forest Users' Group (CFUG) is in ward numbers five, six and seven of Khalanga Village Development Committee (VDC) of Pyuthan district. The total area of the CFUG is 90 hectares. The total number of user households is 226 with a total population of 1,304. There is not a single non-user household. The major caste/ethnic groups are the Gurungs, Magars, Kamis, Damais, Sarkis, Newars, Brahmins and Chhetris. Sixty five percent of the males and 30 percent of the females of the total population are literate. There is an executive committee of 13 members of which two are females. All executive members are literate except two females. There are two clubs, namely, Sarosoti Club and Malla Rani club, both working in the field of social welfare. Agriculture is the predominantly practiced economic activity. Almost 75 percent land of the community is arable/cultivated land. Paddy, wheat, lentil, potato and maize are the major agricultural crops grown by the community. Almost 80 percent of the total households are food-deficit. They go to neighbouring cities for earning the income from the unskilled labour jobs.

Previously, the forest had been protected as Panchayat Kabuliat Ban before the downfall of *Panchayat* system in 1990. (A *Panchayat* was the lowest politico-administrative unit for 30 years in a period between 1961 and 1990 and after 1978, community forests were under the jurisdiction of it). A forest guard had been employed to take care of the forest and the forest was named after the *Ban Pali* (the forest guard). He was paid one *Pathi* (almost 3 kgs.) of cereal crops from each user household every year. When *Panchayat* was collapsed in 1990 following the revolution for multi-party democracy, there was no any organization to take care of the forest and consequently, forest was massively destroyed.

People had to spend longer hours to fetch a single load of firewood. They realized that forest should be protected for their future generation and eventually, they got united as community forest users' group in 1990. Constitution was prepared after the discussion with the user members for which the Ranger also helped technically. However, VDC chairman, ward members and village leaders played the leading role for the preparation of constitution. There is an Executive Committee of 13 members including two females. One advisory committee with three members was also set up from among the users to give legal advice to the Executive Committee. These members were also elected unanimously from among the users. Forest official drafted management plan which was approved unanimously by all users after the extensive discussion. At present, the forest is being managed in accordance with the plan which divides the forest into different sections and forest products such as the firewood is extracted from each section rotationally. The nursery management and planting and replanting of tree saplings is carried out in order to manage the waste- lands. A sample plot has been established for forest management practices such as pruning, loping and thinning. Preparation of the constitution and management plan and their submissions to the District Forest officer (DFO) with an application are necessary sequential steps of the process of forest handover. This community forest was handed over in 1991. The CFUG has received post- handover supports such as regular follow-

ups and training on nursery management, pruning, lopping, clearing and selective harvesting. The CFUG has established group to group network with a CFUG in Kavre district.

Community has been managing the forest by planting trees, managing nursery and controlling landslide through plantation. Forest products such as *Khar* (thatching materials) and fuelwood are harvested once a year by paying Rs. 10 for *Khar* and Rs. 25 for firewood. The income from the forest products is deposited in the bank account. It has Rs. 40,000 as the balance in the bank account so far. Committee has employed two forest guards by paying Rs. 500 to each. The financial records are being maintained by the treasurer and the account is being checked up by the committee once a year to maintain proper financial records.

Community has the knowledge of the government community forest policy which recognizes users as protectors and users. Although community does not have knowledge on soil conservation, they know the importance of soil conservation such as tree plantation for controlling landslide.

4.0 BUKENIDADA COMMUNITY FOREST USERS' GROUP, PYUTHAN (POST-HAND OVER)

Bukenidada Community Forest Users' Group (CFUG) is in ward number seven of Maranthana Village Development Committee (VDC) of Pyuthan district. This community forest is approximately four and half kilometers away from the nearest motorable road. Its total area is 19.1 hectares. There are a total of 83 user households with a population of 374 of which approximately 50 percent are males and 50 percent females. Though the forest is in ward number seven, a few households of ward number nine living close to the forest are also the members of this CFUG: The Magars are the predominant ethnic group of the CFUG followed by caste groups such as the Sarkis (shoe-makers), Chhetris, Kamis (Blacksmiths), Damais (tailors), and Brahmins. About 60 percent males are literate whereas the reported literacy rate of the females is only 25 percent. Most of the untouchables (Damais, Kamis and Sarkis) are illiterate -- a function of poverty. In 1993, an executive committee of the CFUG was formed consensually which consists of 13 members of which two are females. Almost all ethnic/caste groups have been represented in the executive committee. Agriculture is the predominant occupation of the CFUG members. Paddy, lentil, wheat and potato are the principal crops grown in the *Khet* (lowland) and maize, barely, wheat, pea, lentil and mustard are the principal crops grown in the *Bari* (upland). As reported, only 5 percent households are self-sufficient in food production and the rest 95 percent households cope with the food-deficit situation by working as seasonal unskilled labourers both in the districts of India and Nepal. No developmental activities have been launched so far in this area.

The user informants unanimously reported that two factors were principally responsible for inspiring the local people of being organized into a CFUG which comprised continuous degradation of forest (due to the unrestrained exploitation of forest for meeting the timber, fuelwood and fodder requirements) and the direct influence of the CFUG organizational activities of the neighbouring communities. The local people, being heavily inspired/influenced by these two factors, gathered to discuss about the conservation of the degraded forest and its consequence was the organization of the CFUG. Households living close to the forest and utilizing it were unanimously identified as the members of the CFUG. There was a conflict regarding the boundary of the forest with other two adjoining CFUGs (each group claiming some stretch of the forest as its own). But the conflict was resolved with the intervention of local forestry officials by convincing and delimiting the boundary of the forest.

The CFUG had framed the constitution by taking the technical inputs of the Ranger and incorporating the opinions of the community leaders. Though the female user informants could not elaborate the essence of the constitution, male user informants reported that constitution contains rules and regulations which govern the behaviour of the users vis-a-vis the forest exploitation. When the constitution was framed with the technical inputs of the Ranger and agreed by the users' general meeting, it was submitted to the District Forest Officer (DFO) for the approval. The users' executive committee was democratically selected of users by a general meeting which was actively participated in by the users belonging to different ethnic/caste groups. After the approval of the constitution by

the DFO and formation of the users' executive committee, the CFUG prepared its forest management plan with the assistance of the Ranger which outlines the modus operandi of the sustainable forest exploitation. The forest management plan was also unanimously approved by the CFUG members. And eventually, the forest was handed over to the users by the DFO by issuing a certificate. The CFUG has received the post-CFUG formation support such as the training on the forest management such as nursery management, plantation techniques, silvicultural practices (such as pruning, loping, thinning, etc.), follow-up (supervision) and record-keeping.

Currently, the users are managing the forest pursuant to the management plan. For example, the user households have to obtain coupon from the users' executive committee for the extraction of fuelwood by paying Rs. 10. Similarly, Rs. 5 has to be paid for obtaining a coupon for the extraction of Khar (thatching materials) and grass. As of March 10, 1997, the executive committee had collected Rs. 11,000 from the sale of forest products and imposition of fines. The amount is deposited in the bank. The treasurer has received four days' training on book-keeping imparted by the forestry officials and he has maintained the financial records properly. The user informants have held positive attitude towards the forestry officials because the latter have provided the silvicultural skills, to the users (to a limited members), regular supervision/follow-up and book-keeping training to the treasurer in addition to the assistance provided for the preparation of the constitution and forest management plan. The informants are of the opinion that sincere adherence to the community forest rules and regulations, provision of the opportunity of the forest management skill training, unity among the CFUG members, etc. are the principal factors contributing to the success of community forest. Conversely, lack of unity among the CFUG members, violation of the rules and regulations and lack of forest management skills are the barriers of the implementation of the community forest project.

Though a few user male and female informants are not knowledgeable of the community forest policy, most of the informants reported that the government community forest policy encourages the local people to protect their existing forest and plant trees and allows them to enjoy the products as their own property. But the informants are unaware of the government conservation policy. The knowledgeable informants are of the opinion that government forestry rules and regulations have hoped the locals to develop the community forest.

Albeit the female informants do not have knowledge about the silvicultural practices (loping, pruning, thinning, etc.), most of the male informants reported that they have knowledge on these practices. It has been so because the males are provided the training on these practices. Since the forest is quite young at the moment, silvicultural activities except the clearing to allow the timber trees to grow are not practiced. Stated in other words, the timber trees are not silviculturally managed because of their young age.

Timbor is the main medicinal plant available in the forest area which is exploited once a year as per the need of the users. The informants have no knowledge about the sustainable exploitation of the medicinal plants because, to date, no training has been imparted to them.

5. LALIGURAS COMMUNITY FOREST USERS' GROUP, SALYAN (POST-HAND OVER)

This Laliguras Community Forest Users' Group (CFUG) is in ward number six of Sijwa Takari Village Development Committee (VDC). It is approximately five kilometers from the motorable road. The total area of the forest is 35.3 hectares. It is a conserved forest but enrichment plantations are done once a year. The forest has been conserved by the users for the last six years. The total number of users' households is 53 with a total population of 321 of which 171 are males and 150 are females. There is not a single non-user household. The community consists of mainly the Kanwar, Giri, Rawat, Bista and Newar caste/ ethnic people. There is an executive committee of 11 female members of the CFUG. Four males are designated as the advisors to the executive committee. These members of the committee have had strong social relationships for mutual co-operation. There is a Mothers' Group formed by Public Health Office for the distribution of family planning devices and motivation for immunization. Some income generating and skill development activities have been launched by District Women Development Office. Agriculture is the predominately practiced economic activity supplemented by animal husbandry. Paddy, wheat, millet and legumes (pulses, beans, soybeans, etc.) are the principal crops grown for the subsistence.

It has been ascertained that the District Women Development Officer was instrumental in inspiring a group of seven women who had gone to the district capital for participating in a training on women development activities and in the wake of it, the District Forest Officer (DFO) came to village and asked them to organise a CFUG. Then, a general meeting of the potential users of the forest was called which was participated in by the representatives of 48 households (now the households have increased to 53 due to the separation). Both males and females of these households were present. This general meeting resulted in the formation of CFUG which included all the 48 households of the ward number six of Sijwa Takuri VDC. As the process of group formation started and rumour spread about the likelihood of the handover, conflict occurred when a few households of the adjoining ward number one claimed that some stretch of the forest was theirs (boundary conflict). But after three months, the conflict was resolved with the intervention of the DFO who asked the CFUG to provide four hectares of forested land to the claimants of adjoining ward which made them acquiesced. Then, they applied to DFO for the registration of their group. The Ranger, a minor forestry official, helped the community to draft the constitution which outlined the rules and regulations (sanctions and fines) for the systematic management of the forest. After the extensive discussion of the drafted constitution in the general meeting of the users which was participated in by all males and females of the 48 households, it was consensually approved. However, barring the members of the executive committee and some village leaders, the general users do not have the detail knowledge about the rules and regulations set in the constitutions. The users' executive committee of 11 women and four advisors were also unanimously elected from among general users. Then the forest management plan was drafted by the Ranger in the presence of the villagers' general meeting. It was revealed that the key informants (more knowledgeable people) of the community played a dominant role in finalizing the forest management plan which was later approved by all users. The

Ranger also did the forest survey, mapping and forest inventory. The forest is being managed in accordance with the plan which contains details about timber, fuelwood and fodder extraction (and their fees), silvicultural activities such as pruning and thinning, forest protection, etc. Thus, the community is aware of the fact that application to DFO office for registration, constitution preparation and submission to DFO and preparation of forest management plan and submission to the DFO for approval are the sequential steps of the process of community forestry handover. However, some general users do not know what does the management plan contain. The CFUG has received post-handover support such as frequent visits by the Ranger (follow-up), four-day training on tree plantation, pruning and thinning imparted to the two leaders of the committee, four-day book-keeping training imparted to the secretary of the committee, etc. The CFUG is linked to a CFUG Federation of the district for which it has to pay Rs. 200 annually.

Users, pursuant to the management plan, have divided the forest into four blocks/plots for yearly rotational pruning, lopping and thinning practices for timber management. They harvest dead, decayed and dying trees for fuelwood. Every household has to pay Rs. 5 for extracting grass, Rs. 10 for fuelwood and Rs. 500 for one *Sallo* tree (pine) for timber (when required). Such money including the fines is deposited in the committee's bank account which can be drawn with joint signature of the chairman and an advisor. They have already constructed a *Chautari* (community resting place) by expending Rs. 10,000 from CFUG's fund. The committee has maintained all the accounts by keeping bills, receipts and documents properly in a record file. The community has good attitude towards forestry officials for a number of services rendered above. They also substantially exploit a number of medicinal plants such as *Chiuri*, *Harro*, *Timor*, etc. But the technique to exploit the medicinal plants is not taught to the farmers.

Community has the knowledge of the government community forest policy which recognizes users as protectors and managers. The users are not really cognizant of the government's conservation policy but are aware of soil conservation office recently established at district headquarters. They are positive towards government forest policies, rules and regulations because they have created an ambience for the better management and utilization of the forest.

6.0 SIDHA GUFA COMMUNITY FOREST USERS' GROUP, SALYAN (POST-HAND OVER)

The Sidha Gufa Community Forest User's Group (CFUG) is in ward numbers four, five, six and eight of Kajeri Village Development Committee (VDC) of Salyan district. It is approximately nine kilometers away from the motorable road. The total area of the forest is 137.75 hectares. It is a conserved forest. The total number of users' households is 346 with a total population of 1,724 of which 879 are males and 845 are females. There is not a single non-user household. The community consists of mainly the Brahmins, Chhetris, Sarkis, Kamis, Damais and Badis. Almost all these caste groups have been living in this place for generation. There are no recent migrants. The Kamis, Damais, Sarkis and Badis are mostly illiterate people due to their poverty. There is an executive committee of 17 members of which five are females and there is representation from each caste group. These members have had relationship in terms of co-operation for economic and social activities. Six out of 17 executive members are illiterate. Asian Development Bank (ADB) has been assisting to supply drinking water by constructing a reservoir tank and taps and CARE Nepal has been working to provide irrigation facility by constructing a canal. Almost 1,000 people of different castes from 135 households will be benefitted by this project. The major agricultural crops grown in this community are paddy, wheat and millet. Almost 60 percent of the total households have food deficiency. They go to neighbouring cities for earning income by working as unskilled labourers.

When the forest was destroyed massively in the past, people of this community realized the importance of forest and started to conserve it. The knowledgeable and elderly people of ward numbers four, five, six and eight gathered at a place and decided to form the users' group to protect and utilize the forest of their respective wards. Altogether 346 households were identified as the users' group of four wards having similar topography. Then, forest area was also divided into four blocks for better management. There has not been any conflict regarding users' identification. However, there inter-ward conflict arose regarding the use of forest products. For example, people of one ward were used to enter the forest block of another ward for collecting firewood and extracting timber. The community resolved it by appointing forest guards in each block and by imposing rules of charging Rs. 5 to 10 against such illegal actions. Then, they applied to DFO for the registration of their group. The Ranger presented the drafted constitution to the users at the school compound where women had also participated in. The constitution outlines organization of the user's committee, and control of illegal activities to protect and utilize the community forest. After the extensive discussion held by the users who attended the meeting, it was approved consensually. Most of the female users do not have knowledge about constitution and its mode of preparation. The users' committee of 17 members of which five are females were also elected unanimously from among the users. However, the name and position of the executive members were proposed by the VDC chairman. Then, the forest management plan was drafted by the Ranger in the presence of villagers' general meeting. It was approved by all users and decided to forward to DFO for his approval. The Ranger also did forest survey, mapping and forest inventory. Female users except the executive members do not have knowledge about forest management plan. The forest is being managed in accordance with the plan which includes silvicultural activities and punishments.

The community is aware of the fact that application to DFO office for registration, preparation of the constitution and forest management plan and their submissions to the DFO are sequential steps of the process of the forest handover.

The CFUG has received the post-handover supports such as frequent visits by the Ranger, training on the plantation and pruning and help to sell dead trees and timber by arranging auctions. The users have heard about establishment and institutionalization of group to group network in Salyan district but they have not been involved in its process.

As specified in the management plan, the community has planted trees in the forest of ward number eight and practiced thinning in the forest of ward number six. Any users can buy up to 30 cubic feet of timber of pine in a year by paying Rs. 200 along with additional 20 percent sales tax per cubic foot. The violators of the forest rules are penalized. For instance, a person has to pay Rs. 25 per bundle of illegally collect fodder and Rs. 50 for illegally collected fuelwood. Community has opened a bank account. Although the users have collected money by imposing tax on timber sale, they have not paid it to the government so far. Forest guard in each ward receives two *Pathis* (about 6 kgs) of cereal crops from each user household per year as salary. Community has provided financial supports to other social activities. For example, they have donated almost Rs. 15,000 to the village school for paying the salary of the school teachers. The committee has maintained all the accounts properly. The committee has positive attitude towards forestry officials for a number of services rendered above. All CFUG members do not have knowledge about thinning and pruning. They have knowledge to clear the surface of forest by collecting dry leaves. Different kinds of medicinal plants such as *Silpu*, *Pakhenbeed*, *Tindu/Khalnu*, *Disely*, *Vala*, and *Chotro*, are available in the community forest. These medicinal plants are harvested once a year.

The CFUG has the knowledge of the government community forest policy which recognizes the users as protectors and users of the forest. Most of the users including females do not have knowledge about soil conservation policy. The CFUG informants expressed that they do not face any problem of soil erosion and hence, they do not need to know about it.

7.0 TAKIYAPUR COMMUNITY FOREST USERS' GROUP, DANG (POST-HAND OVER)

This Takiyapur Community Forest Users' Group (CFUG) is in ward number seven of Pawannagar VDC of Dang district. This community forest is two kilometers away from the motorable road. Total area of the forest is 3 hectares which has all the plantations. There are a total of 27 households with a population of 210 of which 103 are males and 107 females. Tharus are the autochthonous tribal people whereas Chhetris and Kamis (blacksmiths) are the hill migrant communities. There is an executive committee of CFUG which consists of 11 members of which eight are males and three are females (two from Tharu and one from Kami). The community is predominantly agrarian. Paddy and wheat are the principal crops of lowland and maize and mustard are the principal crops of upland. Backward Society Education (BASE) -- a NGO run by conscious Tharu youths -- has launched adult literacy programme among the Tharus for the last five years.

Initiation of the community forest in this small village is the consequence of the strong disapproval and protest for forest exploitation by the people of Manakamana, an adjoining village where the numbers of Takiyapur CFUG used to go for fulfilling their timber and fuelwood requirements. To put it in other words, once the people of Manakamana village started conserving their forests, the residents of Takiyapur felt the severe scarcity of fuelwood and timber. Then, they held a general meeting of 27 households which decided to initiate a community forest by planting trees in the wasteland of the village. Thus, the necessity of the forest products forced the villagers to be united for community forest plantations -- an action which would fulfill their future needs. CARE Nepal also assisted the local people for being organized into CFUG by making them feel the necessity of organization.

No conflict arose regarding the identification of the users and the boundary of the community forest. It was reported that the Ranger, staff of CARE Nepal (an INGO which works for the organizational aspect of the forest resource management) and the local village leaders played an instrumental role in the preparation of the constitution. Though illiterate females and some males have no knowledge about the rules and regulations, some of the informants reported that the constitution reflects the opinions of the villagers which is prepared for governing the behaviour of the users of the forest. The users' executive committee is also organized consensually which has included its female members from the backward community such as the Tharus and the untouchable such as the Kami. Though most of the women informants did not have any knowledge about the forest management plan formulation, most of the male informants had the knowledge about it. The Ranger and staff of CARE Nepal helped the users to draft and finalize the forest management plan by incorporating local users' views from a general meeting which was mostly participated in by the males. It was revealed by the informants that forest management plan outlines the ways according to which the group has to manage the forest such as activities of plantation, grass cutting, etc. Except the female of the executive committee, other female informants are not knowledgeable about the process of forest hand-over. However, male informants had the knowledge about it. They reported that once the forest management plan was submitted to the District Forest Office, the District Forest Officer (DFO)

and the chairman of the executive committee signed the agreement and certificate of forest hand-over was given to the CFUG. The chairman and one woman member of the user committee took part in a seminar organized for the executive members of the CFUG. Except this invitation, no other post - CFUG formation support has been provided.

Apropos of the behaviour of the users, villagers gather once in every six months for the plantation of the saplings. There is not forest management practice at this moment because the forest is very young (2-3 years old). Hence, except a few male members of the executive committee, all members of the CFUG (both males and females) do not have knowledge about the scientific forest management (pruning, lopping, thinning, etc.). Since there are not medicinal plants planted, the members also do not have any idea about their exploitation. Currently, one *Chaukidar* (forest guard) takes care of the forest for which he is annually paid Rs. 5,500 and each member household has to contribute Rs. 18 per month to meet this salary expenditure. The executive committee has also generated some income from the sale of grass through open bidding system. They earned Rs. 1,200 last year which is with the committee. It was also reported that such money is lent among the member users. Book-keeping is not properly maintained owing to the lack of training.

Majority of the male informants reported that they have knowledge about the community forest policies as well as rules and regulations. They are of the view that the objective of the government forest policy is to handover the forest to local users for its proper management. However, female informants (save one or two informants of hill origin) have no knowledge about the community forest policy, rules and regulations. Both sexes lack knowledge about soil conservation policy. It has been reported that the sense of ownership is the main contributing factor to the success of community forest.

8.0 PALUTHAN COMMUNITY FOREST USERS' GROUP, DANG (POST-HAND OVER)

The Paluthan Community Forest User Group (CFUG) is in ward number five of Laximpur VDC of Dang district. The forest is in one kilometer distance from the motorable road. The total area of the forest is 14.84 hectares which has been conserved for the last 15 years. There is a total of 55 households as the general members of CFUG with a total 321 population (of which 150 are males and 170 females). The predominant ethnic group is Magar followed by Chhetri, Gurung, Sarki, Kami and Damai (the latter three being the untouchables). 75 percent males are reported to be literate whereas 90 percent females are illiterate -- a function of poverty. The rampant deforestation till the period of early 1980s and the local political leaders' visits to other community forest areas inspired the local people to start the conservation through the community efforts and it was indigenously managed until three years ago when a CFUG was formally organised. Agriculture is the mainstay of the villagers who grow paddy, wheat, maize and mustard as their principal crops. Half of the households are food ---deficit which supplement their household income by wage earning activities (both agricultural and non-agricultural).

In 1981, the then Pradhan Pancha (now the chairman of Village Development Committee) and a local farmer visited Sindhupalchowk district (a hill district of Central Development Region of Nepal) where there are successful stories of community-managed forest systems and as a consequence of it, both became very impressed. And, upon arrival in the village, they started making the people aware of the community-managed forests. Shortly, a committee was organised which functioned until 1994. Thus, initially the forest was managed through the people's initiative because they had been aware of the effects of the rampant deforestation.

In 1994, the users of this forest (all 55 households) were united and formed into community forest users' group (CFUG). Then, an executive committee of 11 members was organised by holding a general meeting of all 55 user households. One of the members of the committee was female who was not called to attend the meeting and later her membership was discontinued. Female informants reported that they were not consulted during the period of the formation of the committee. There was a conflict for the determination of the forest boundary because some part of this forest incidentally happened to be within the boundary of ward number nine of this Laxmipur VDC. However, this disputed patch of forest was included into the forest of Paluthan with the intervention District Forest Officer (DFO). This disagreement with the boundary is still continuing. Analogously, the inhabitants of the ward number four of Tribhuvannagar Municipality claimed the continued use of this forest (because they were traditionally using it) which is now solved through mutual understanding.

The constitution was framed by the users' general meeting with the necessary technical inputs of the Ranger which contains the details about the rules and regulations for the governance of the behaviour of the forest users and their committee members. Though this was the voice of males, surprisingly majority of the women informants do not know how the constitution was framed and what it contains.

It came to be known from the male informants that the forest management plan contains the procedures of plantation, silvicultural activities such as thinning and pruning, grass cutting, forest harvesting, etc. However, female participation was zero during the period of the preparation of constitution. They also do not know about the process of forest handover. But male informants have the knowledge of the process of forest handover (e.g. formation of CFUG, preparation of the constitution and submission to DFO, preparation of forest management plan and submission to DFO for approval, etc.). Post-CFUG formation supports such as regular monitoring, suggestion for tree improvements, observation programmes and short training on the forest management techniques have been provided by the forest officials.

Currently, there is a *Chaukidar* (forest guard) employed by CFUG who is paid Rs. 600 per month. He patrols the forest for its protection. Each household has to pay Rs. 11.00 per month to pay his salary. Reportedly, the forest is being managed in consonance with the forest management plan. The forest is open to the user households once in a week for fuelwood extraction. They cannot cut the live tree. The axe and *Khukuri* (the Nepali national knife) cannot be taken to the forest. Only the dead and fallen branches have to be collected. Though the users have knowledge on pruning, thinning and lopping, it has not been put into the practice till present because they are of the opinion that their trees are already fully grown (and hence, no need). Some wild medicinal plants such as *Harro* (used for curing cough), *Kanchirna* (used for curing animal's liver diseases), *Hadchurna* (used for the treatment of bones), etc. They are used in unprocessed form but they lack knowledge of the sustainable exploitation of these plants.

Most informants have had knowledge about the community forest policy but lack knowledge on the soil conservation policy. They also know that the right of the CFUG is to use the forest products and their responsibility is to manage the forest in accordance with the government's community forest policy. The male informants' attitude towards the forestry officials is positive because they have received the required assistance from them. But the female informants participating in the group interview have no knowledge about their services. Unity of the villagers, people's awareness towards the community forest and their support from the forest office, etc. are the contributing factors to the successful implementation of community forest. Ignorance among the users and illegal exploitation of forest by the neighbouring communities are considered as the barriers of the effective implementation of the community forests.

APPENDIX - 2: PRE-HAND OVER CFUGs

1.0 NEWARBAN COMMUNITY FOREST USERS' GROUP, PYUTHAN (PRE-HAND OVER)

This Newarban Community Forest Users' Group (CFUG) is in ward numbers seven and eight of Khalanga Village Development Committee of Pyuthan district. It is approximately 1.5 km. away from the motorable road. The area of the forest is 19.7 hectares. There are 70 user households with a total population of 350 in the community. There is not a single non-user household. The community consists of mainly the Brahmins, Chhetris, Sunars, Damais and Magars. Almost 60 percent of males and 35 percent of females of this community are literate. There is one executive committee of 11 members including a female. Almost 70 percent of the total land is cultivated. The major crops grown by this community are maize, barley, wheat, lentil, mustard, paddy and soybean. Almost 98 percent of the total households are food deficit and they supplement their income from agricultural production by working as unskilled labourers in India and Nepal.

This forest had been protected since 1978 by the people themselves by appointing one forest guard to take care of the forest. He was paid 1 *Pathi* (about 3 kgs.) of food grains for his salary every year by each household. However, the forest was destroyed massively in 1978. Then people of the ward numbers seven and eight gathered to form a committee to conserve the forest and identified 350 households as users. Since then CFUG has been continuing its conservation activities. There is a boundary conflict of the community forest. One user of dominant caste (Karki) has claimed that his 1.5 ropanis (20 ropanis is equivalent to one hectare) of land is included inside the forest area. The conflict has not been resolved yet. Now this CFUG has an executive committee of 11 members of which one is female. This executive committee has been changed from time to time since 1978. This executive committee has the old forest management plan prepared in 1978 which excluded two of the total three forest plots, namely, Barikera forest and Bhimlari forest. The old forest management has now been rejected by the users. The new executive committee has been formed three months ago which is now preparing a new management plan. The forest is managed by restricting people and animal to enter the forest. Because of the hostility between two different castes (between as the Karkis and Sarkis), the forest is not properly managed. The conflict arises because of excluding the two forest plots in the CFUG area. No plantation activity has been performed and no forest guard has been employed yet. The users are allowed to collect only dry leaves once a year without any charge according to the decision of committee. None of the other activities such a financial management system and book-keeping are done by this CFUG.

Submission of constitution and management plan are necessary steps of the process of forest handover. Community does not have knowledge on technical skills of forest management such as pruning, lopping, thinning, clearing and selective harvesting. There are neither medicinal plants nor the local people have knowledge to exploit them. Informants have knowledge on the community forest policy which recognises users as protectors and managers of the community forest. They do not have knowledge about soil conservation policy. They do not have positive attitude towards government forest officials because they have not received any financial and technical help so far.

2.0 GHORTHAPA COMMUNITY FOREST USERS' GROUP, PYUTHAN (PRE-HAND OVER)

This Ghorthapa Community Forest Users' Group (CFUG) is in ward number five of Khaira Village Development Committee (VDC) of Pyuthan district. This community forest is 13 kilometers away from the nearest motorable road. Its total area is 200 hectares. There are 91 user households with a total population of 455 of which 50 percent are males and 50 percent females. The predominant ethnic group is the Magar followed by the caste group people Chhetris, Kamis (blacksmiths) and Giris. About 70 percent males and 30 percent females are reported to be literate. However, the literacy status of the Kamis is extremely low -- a function of poverty and lack of interest. Agriculture is principal means of livelihood. Farmers grow paddy, wheat, and lentil in the *Khet* (Lowland) and maize, mustard, barley, wheat and lentil in the *Bari* (upland). As reported, about 50 percent households are reported to be self-sufficient in food production. The other 50 percent food-deficit households supplement their income from the agricultural production by working as seasonal unskilled labourers (both agricultural and non-agricultural) both in India and Nepal. To date, no developmental activities have been launched in this community.

The continuous degradation of the forest and the consequent scarcity of fodder, fuelwood and timber inspired the local community to be organized into a CFUG. In 1991, a general meeting of the forest users was called for the identification of the users which, eventually, concluded that 91 households living close to the forest are the real users of the forest. No conflict arose regarding the boundary of the forest. The users have also drafted the constitution with the technical inputs of the Ranger which contains the rules and regulations regarding the use of the forest in addition to the functions of users' executive committee. Subsequent to the preparation of the constitution, a users' executive committee consisting of 11 male members was consensually formed by the general meeting of the forest users. Having done this much, the CFUG has recently applied to the District Forest Officer (DFO) for initiating the process of the handover of the forest. Some female informants do not have any knowledge about the preparation of constitution, formation of the users' committee and preparation of management plan. It was also reported that the users' committee has prepared a management plan with the consensus of the CFUG which has divided the forest into two parts, that is, one part of the forest is open to the users for the collection of the fuelwood and grass and the other part is closed for its better growth (the rotational time for the exploitation is decided by the committee). The users can collect fuelwood (mainly dry, fallen branches or twigs) any time when needed.

The users (both male and female) have neither any knowledge on the silvicultural activities (pruning, lopping, thinning, etc.) nor practiced any of them. Though a few female informants do not have any knowledge on the government forestry policy, most of the female and male informants have knowledge on it. It creates a situation for the local communities to work as protectors and managers of the forests in the form of the collective property. They are neither aware of the soil conservation policy nor have done any activity to conserve the soil.

Albeit most of the general user informants of both sexes are unaware of the sequential steps of the process of handover of the community forest, they are found to have had knowledge about the right and responsibility of the CFUG. It has been emphatically said that the right of the CFUG is to use the forest products as per the need and the responsibility is to comply with the rules and regulations pertaining to the use of the forest. Similarly, the right of the users' committee is to punish the violators of the rules and regulations and the responsibility is to implement the forest management plan.

There are no medicinal plants and they also do not have knowledge about the sustainable exploitation of such plants. They have not got any forest extension services and materials. The informants are of the opinion that compliance with the rules and regulations set by the community would contribute to the successful implementation of community forest and conversely, non-compliance would work as the barriers.

3. RIMNA COMMUNITY FOREST USERS' GROUP, BANKE (PRE-HAND OVER)

This Rimna Community Forest User Group (CFUG) is in ward numbers four and five of Mahadevpuri VDC in Banke district. The area of the forest is 12 hectares. This community forest is 3 kilometers north of the East-West Highway. There is a total of 203 forest using households with a total population of 1797 and about a half of them are females. It has been reported that only five percent of the total population is literate. Only a handful of women are literate. The predominant ethnic groups are the Tharus (the autochthonous tribe) and Chhetris followed by Biswokarma (blacksmiths). Agriculture is predominantly practiced as a means of livelihood. The major crops grown are paddy, maize and wheat. There is no any other development activity in this community.

As reported, there was a dense forest at Rimna until a few years back but the burgeoning needs of the local people coupled with reckless exploitation contributed to the degradation of the forest resources. And the consequence is the severe scarcity of fuelwood and fodder which was giving lesson to the local people about the protection of the forest in order to meet present and future requirements of the forest products. Two of the users had also seen the community forests of the hill districts which had given them the empirical knowledge of the importance of the forests. Meanwhile, a Ranger from CARE Nepal (an INGO working in the forestry sector of Nepal) came to this community in January 1997 and discussed about the community forest management as well as the CFUG organizational process. Then, a general meeting was held which was participated in by almost all potential user households. No problem cropped up in the process of the identification of the forest users. All the 203 households of ward numbers four and five of Mahadevpuri VDC have been included as the CFUG members. But a conflict arose on a issue whether or not to leave some portion of the degraded forest unprotected for the livestock particularly for the rainy season and this conflict still remains unresolved.

Informants (except the Tharu women) reported that constitution is the embodiment of the rules and regulations about the forest management (such as protection and the use of forest products). The constitution was prepared in a participatory manner. It was revealed that about 200 representatives had taken part in the general meeting during the period of the preparation of the constitution. The Ranger of CARE Nepal helped the users in drafting and finalizing the constitution through the incorporation of the views and suggestions of the users pertaining to the forest management. Some informants reported that the constitution contained the provisions about the process of the formation of users' committee and their duties, imposition of fines on prohibited activities (such as Rs. 5 for the entry of a goat, Rs. 10 for a cow and a buffalo, Rs. 500 for the ox-pulled-cart, Rs. 500-1,000 for illegal felling of a live tree, etc.).

There exists a users' committee consisting of 15 members. The surprising thing that happened during the formation of the users' committee is that it was CARE Nepal's Ranger, not the user of the community who proposed the names of the members of the users' committee and which were consensually accepted by the users present in the general meeting. To date, the users have not had

the forest management plan yet. In the absence of the formulation and its implementation of the forest management plan, the forest is being exploited in the traditional way, that is, no practice of selective harvesting. Likewise, in the absence of enforcement of the finalized constitution, forest is still being haphazardly exploited for fuelwood and timber. The autochthonous Tharus, being fearful of the establishment of the national reserve forest in the name of community forest, are exploiting forest products (firewood and timber) as much as they can prior to the enforcement of the constitution. The attitude of the users towards the forestry official, particularly the Ranger of CARE Nepal, is good because it is he who was instrumental in mobilizing and convincing the local people for the initiation of the community management of forest. Unity among the users, awareness of the protection of the forest resultant from the rapid deforestation and external support from the forestry official could contribute to the easy implementation of the community forest whereas the misunderstanding among the users (such as by the Tharus and regarding the boundary of the forest to be delimited) is the barrier.

The user informants are knowledgeable about the government community forest policy because according to them, it aims at handing over the forests to the local people/communities for protection, conservation and sustainable use. Users have no knowledge on government's soil conservation policy but are aware of local soil erosion problem due to the inundation. They are aware of the fact that tree plantation on the river side would contribute to control the soil erosion. User informants are of the view that the right of the CFUG is to enjoy the forest products whereas its responsibility is to protect the forest, establish nurseries, plant trees, accept the government community forestry rules and regulations, etc. They also reported that the responsibility of the user committee is to call meeting of the users, arrange training, convey messages to the users and convince the users to abide the constitution and as well as manage forest according to the management plan. The role/responsibility of the forestry officials is to monitor the CFUG activities, provide training of the forest management to the users, etc. They also know that if the forest is not properly managed, he/she can use his/her authority for the resumption of the community forest.

Though some of user informants reported that thinning, pruning and cleaning as well as selective harvesting are useful for better/scientific forest management, none of these are reported to be practiced. This is the function of the lack of the dissemination of the silvicultural activities by the forestry officials.

4.0 JAN EKATA COMMUNITY FOREST USERS' GROUP, BANKE (PRE-HAND OVER)

This Jan Ekata Community Forest Users' Group (CFUG) is in ward number nine of the Komdi Village Committee (VDC). It is approximately seven kilometers away from the highway that goes to Nepalgunj. There is a village settlement in the western boundary of the proposed CFUG's forest whereas there is a dense government owned forest in the eastern boundary. The total area of the forest is 150 *Bighas* (*Bigha* = 0.68 hectare). It is a conserved forest. Forest conservation activity has started four ago (in December 1992). The total number of users' households is 364 with a total population of 2,000 of which 1,200 are females. Almost 70 percent of the total users are literate. There is not a single non-user household. The community consists of mainly the Tharus, Chhetris, Damais, Sunuwars, Magars, etc. About 35 percent of the total population are Chhetri caste people and they have migrated to this area from the neighbouring hill districts such as Salyan, Rukum and Pyuthan. There is an executive committee of 17 members of which 4 are females. These members of the committee have had strong social relationships for mutual co-operation. PLAN International (an INGO) and Informal Sector Service Centre (INSEC), working in different social sectors like drinking water, toilet construction and human rights. Agriculture is the major economic activity supplemented by animal husbandry. The main crops grown in this village are paddy, maize, wheat, millet, lentil, etc. Almost 50 percent of the total households of different castes have food deficiency and the people of these households go to the neighbouring urban areas such as Nepalgunj and Butwal for earning income by working as unskilled labourers.

In the past, forest was destroyed so massively that these people had to spend longer hours to fetch a single load of firewood and they realized that forest should be preserved for meeting the present household requirements and for coming generation, too. Hence, all active people (both male and female) from 364 households gathered in a meeting to identify the users which was also participated in by the Ranger. This general meeting resulted in the formation of CFUG which included all 364 households of all the six villages of ward number. nine of Komdi VDC. Few people, unknowingly, raised the skepticism that forest products cannot be used for ever. But the skepticism was over when the Ranger and the local leader convinced them about the rationale of the community forest. The Ranger helped the community to draft the constitution which outlines the rules and regulations for the systematic use of the forest. After the extensive discussion by the male people the constitution was finalized in February, 1997. Only a few male informants understand about the constitution. None of the female has had knowledge of the constitution because of their non-involvement in its preparation. The user's executive committee is of 17 members of which four are females who were unanimously selected from among the female forest users. The forest management plan was drafted by the Ranger which was later approved by all the users. The forest is being managed by extinguishing the fire, prohibiting the collection of young trees for firewood and grazing livestock inside the forest.

Many people have suspected that forest is going to be reserved by the government and they will be restricted to use forest products. And as a consequence, they have already collected firewood

haphazardly as much as they can. It was reported that a few people have collected so much firewood that would be enough for eight years. Almost 50 percent of the total users depend on firewood sale which they collect from the government-owned forest (which is close to the community forest). People now have strong commitment for the protection of forest by taking actions against illegal work such as setting fire, felling of the live trees by making constitution and submitting the application to the forest officials for its approval, etc. The users think these activities are some of the steps to be followed for forest handover. However, female users do not have any knowledge about the process of community forest handover because they are not exposed to these processes. Everything needed is done only by their male representatives.

Few users suspect about the future of community forest because of the large number of users and their less participation for its conservation. Few households who depend on firewood sale for their livelihood may not co-operate in this effort. Another alternative of income generating activities must be provided to them for the sustainability of community forest.

Users have divided the forest into five different blocks for rotational pruning, lopping, thinning and collection of firewood and fodder and forest protection and plantation (especially Sisso). Each executive committee member has contributed Rs. 50 to open the CFUG bank account and now they are going to collect Rs. 10 per month from each user of CFUG. One secretary has been employed to keep office records and accounts. 150 user households earn cash income from other economic activities other than forest products such as goat-raising, buffalo-raising, etc. Forestry officials have helped them to form users' group and users' committee and prepare constitution and hence, the users have positive attitude towards them. Most of the users have knowledge about local medicinal plants such as *Rasulla* (which helps to make soap), *Kurrilo*, *Santabar*, *Aamla*, *Baral*, *Barrow*, etc. But they have not been exploited to date because of their limited availability. Recently, two women users have recently got an opportunity to participate in training on medicinal plants organized by District Forest Office.

Community has the knowledge of the government community forest policy which recognizes users as protectors and managers of the forest products. Community is found to have little knowledge about soil conservation policy but people have done soil conservation activities such as the preparation of the river embankment and retaining wall construction for the protection of soil.

5.SARVODAYA COMMUNITY FOREST USERS' GROUP, DANG (PRE-HAND OVER)

This Sarvodaya Community Forest Users' Group (CFUG) is in ward numbers one, two, three of Gadhuwa Village Development Committee (VDC) of Dang district. It is approximately 5 kilometers away from the motorable road. The total area of the forest is 138 hectares of which 67 hectares have had planted forest. Hence, it is both preserved and planted forest. The total numbers of user households is 357 with a total population of 2,335 of which 1,262 are males and 1,133 are females. All the households of this community are members of CFUG. Regarding the caste/ethnicity, the community consists of mainly the Tharus, Kumals, Brahmins, Chhetris, Muslims, Sarkis, Damais and Kamis. The Tharus and Kumals are the oldest inhabitants. The Brahmins, Chhetris and Kamis have been the migrants from the hills. Most of the males of the hill origin communities are literate. There are 13 members in the executive committee of the CFUG of which three are females. The executive members are from different caste/ethnic groups. Currently, there are three non-governmental organizations (NGOs) in this community. These are: (i) Chetnseel Mahila Samaj (Conscious Women's Society) working in the field of training on cutting and sewing; (ii) Yuba Bahumukhi Club (Youth Multipurpose Club) working in the field of creating awareness among the people in the community, and (iii) Yadav Sudhar Sewa Sangha (Yadav Upliftment Service Association) working for the betterment of the Yadav Community. Agriculture is the predominantly practiced economic activity. Paddy, wheat and maize are the major agricultural products. Mustard and lentil are also grown as cash crops in this community. Backward Society Education (BASE) has been working here for the last 4.5 years by launching literacy classes for the females and children belonging to the poorest households.

The main reason of being organized into the CFUG is for the fulfilment of their future needs of timber and firewood. There are three plots in the area of community forest. Conservation of the forest has been started by planting trees in one of them since 1994. At first, people of ward number one had held a general meeting and formed the users' group which was later joined by the people of other two and three wards. Local forest officials had helped in this regard.

There was not any conflict regarding the boundary of community forest. Local forestry officials provided the guidelines for the preparation of the constitution which was subsequently discussed and revised for four/five times and then was finalized and submitted to the District Forest Office (DFO). Initially, there were 17 members in the executive Committee who were reduced to 13 after the preparation of constitution. The committee represents all major castes. The forest management plan is under preparation. Forestry official from CARE Nepal are helping in this matter. Most of the women do not have knowledge on community forestry policy. One of the executive member interviewed did not know about how the constitution was prepared. Some of the general users do not know that there exists an executive committee.

There are three plots of the forest having an area of 47, 20 and 71 hectares. The first two plots have some newly planted trees whereas the latter plots (of 20 and 72 ha.) have some old trees and need

massive afforestation. They are protected forests by restricting animal grazing. There are three forest guards employed who are paid Rs. 500 per month each. The CFUG has income from Khar (thatching materials) harvesting. In 1996, they had sold Khar of amounting Rs. 8,000. This year also they sold Khar of Rs. 2,000 and grass of Rs. 3,000. The CFUG members are provided the Khar on priority basis at the rate of Rs. 2 per load. Only then comes a priority for the outsiders. Few local potters bring clay from the forest and make earthen pots. Community forest is discouraging this practice because of the soil erosion problem in the forest. Users collect Rs. 5 from each household every month. There is an executive committee member designated in each village pocket of settlement who collects the sum from all the households of his area. The chairman, secretary and the treasurer are responsible for the financial transactions. The executive committee meeting takes place once in a month at the chairman's house and all the documents are kept there.

Most of the users are of the opinion that the preparation of the constitution and forest management plan and their submission to the DFO are the necessary sequential steps for the community forest to be handed over.

Community has the knowledge of the government forest policy which is a measure taken by the government for both preserving the national forest and empowering the users to benefit from the forest in the long run. They do not have the knowledge about soil conservation policy. However, they know that plantation on river banks is necessary for soil conservation. They are positive towards government forest policies, rules and regulations because they have encouraged them to protect the forest to meet their present and future requirements of the forest products.

6.0 CHIURIGHAT COMMUNITY FOREST USERS' GROUP, DANG (PRE-HAND OVER)

This Chiurighat Community Forest User Group (CFUG) is in ward number six of Gangapraspur VDC of Dang district. It is approximately nine kilometers south to the East-West Highway. The area of the forest is approximately 20 hectares which is both conserved and planted. Seventy three households are the general members of the CFUG which has a total of 369 population (of which half is that of the males and half females). The ethnic composition is heterogeneous. The predominant caste groups are the Chhetris and untouchables ("Damais"-tailors and "Kamis" - blacksmiths) followed by the Magars, Gurungs, and Tharus. Barring the Tharus (who are the oldest inhabitants of this area), all the other ethnic groups are the migrants from neighbouring hill districts. Seventy five percent of the males are literate whereas a large majority of the females are illiterate. The history of the forest management by the community is only four years old. Agriculture is the mainstay of the village economy. The principal crops grown are paddy, wheat, maize and mustard. The first two are grown in the lowland and the latter two in the upland. About 50 percent of the households are food-deficit who supplement their income by working as labourers within the Dang district and India. Backward Society Education (BASE) -- an NGO run by the Tharu Youths -- has been implementing the adult literacy and income generating programme for the last one year in which women have also started to participate in. It has been providing credit to the rural women group (Rs. 5,000.00) which consists of nine persons. The credit has been channelized for goat-raising, poultry, potato cultivation and grocery. Though the project does not have any impact on the forest management activity (because the project is also new), its literacy programme might help the women to participate more in the future.

On the one hand, the members of the CFUG had experienced the severe scarcity of the forest products owing to the degradation of forest -- a function of the haphazard exploitation in the past. On the other hand, the initiative of the community forest taken by the inhabitants of the neighbouring village also inspired them to start their own community forest. Meanwhile, the local forestry officials also made them aware of the importance of CFUG. And consequently, the 73 households of the ward number six of Gangapraspur VDC living close to the degraded forest were unanimously identified as the members and were organized into a CFUG in 1991. No conflict arose apropos of the process of the organization of the CFUG and delimitation of the forest boundary. Then, they applied to the District Forest Officer (DFO) for the formal registration of their CFUG. Then, the constitution was prepared by the CFUG with the assistance of the Ranger. This CFUG had to change the constitution five times because initially its leading members did not prepare it properly. Now they have submitted their constitution to the DFO for the approval. The existing users' executive committee consists of 13 members (no females.). The executive committee was consensually formed by holding a general meeting. But there were no women representation in the meeting. Therefore, the user female informants reported that they do not know about the process of the formation of the executive committee. Forest management plan has not been prepared so far. Female informants do not know what is forest management plan but some male members of the executive committee are cognizant of it. They are of the opinion that it is the five years' plan for the forest management which will be

prepared in consultation with the Ranger. Only a few male informants are knowledgeable about the process of forest handover.

Regarding their behaviour concerning the forest protection, this CFUG has employed a local forest guard who regularly patrols the forest. He is paid Rs. 450 per month. Each CFUG member household has to contribute Rs. 6 per month. Some income is also generated by imposing fines on the owners of the livestock who deliberately make them astray in the forest. For example, Rs. 5 is fined for a goat entry, Rs. 10 for a cow/ox, and Rs. 15 for a buffalo. Money is also charged for cutting the grass grown on the ground. One member has to pay Rs. 35 for cutting grass in a season. Last year, this CFUG collected Rs. 700 by selling the grass. All this is also used for paying the salary of the forest guard. The book-keeping is maintained by the chairman and the secretary of the committee. The general meeting of the CFUG is held when they have to plant more saplings. There is no knowledge about the establishment and institutionalization of CFUG network in the district.

Most of the informants have the knowledge about the government community forest policy, rules and regulations. All this helps for the conservation of the forests. But they do not have a smattering of soil conservation policy. They also know the responsibility of the executive committee such as collecting money from the members, imposing fines and informing members about the community forest rules and regulations, etc. But female informants are ignorant of it. There is no knowledge about the extension services and materials to be provided by the forest and conservation offices. However, the user informants hold positive views towards the forestry officials and community forest policy because they all contribute to the conservation of the forests.

The user informants reported that they have very little knowledge of plantation, pruning, weeding, thinning, selective harvesting, etc. Last year, they did some weeding in the rainy season. Other silvicultural activities have not been practiced yet. They have neither any medicinal plants nor any knowledge for their exploitation.

Some informants reported that the constitution contains the rules and regulations about the forest management. They also know that trees should not be cut down without permission, houses should not be constructed and cultivation cannot be done in the forest.

7.0 GAI GAURENI COMMUNITY FOREST USERS' GROUP, SALYAN (PRE-HAND OVER)

This Gai Gaureni Community Forest Users' Group (CFUG) is in ward number four (Simka village) of Triveni Village Committee (VDC) of Salyan district. It is six kilometers away from the nearest motorable road. The total area of the community forest is 60 hectares. It is a conserved forest. The total number of user households is 152 with 1007 population of which 510 are males and 497 females. Though the forest is in ward number four, a few households of the ward numbers three, six and seven of the same VDC also utilize the forest because are living close to it. There are no non-CFUG member households. There are mainly two caste group people such as the Chhetris and untouchables (Damai=tailor, Kami=blacksmith and Sarki=shoe-maker). The male literacy rate is 25 percent and that of the female is 10 percent. Currently, there is an executive committee of the users which consists of 11 members and two advisors. Though majority of the members of the committee are from the higher caste (i.e the Chhetris), two representatives from the untouchable community (the lowest rung of the caste hierarchy) have also been included. Of the total 11 members of the committee, three are females. Local people have been conserving the forest by forming an informal CFUG since 1983. Agriculture is the mainstay of the village economy. Farmers grow maize, paddy, millet and wheat as the principal crops. Only 25 percent households are reported to be self-sufficient in food production. The rest households supplement their limited agricultural production/income by seasonally migrating to India to work as unskilled labourers for remittances. To date, no developmental activities have been launched so far.

It has been revealed that the local people experienced massive forest destruction till 1983 which was conducive to the creation of the scarcity of forest products such as fuelwood, fodder and timber. As a consequence of this, they decided to protect the forest by calling a general meeting and thereby making a decision for the appointment of a *Chaukidar* (forest guard) who is paid two *Pathis* (one *pathi* is 3 kgs.) of food grains annually by every household. Despite these details, the formal CFUG was formed only in 1994 with the assistance of the Ranger. All the user households living close to the forest were invited to attend the general meeting for the formal identification of a CFUG which was participated in by 130 representatives (100 males and 30 females). The general meeting formally identified 152 households living close to the forest as the CFUG. Likewise, there was no conflict regarding the boundary of the forest. In this forest, the users disregarded the politico-administrative boundary for the identification of CFUG (as stated in the preceding paragraph, though the forest is in ward number four, farmers of ward numbers three, six and seven living close to the forest have been included in the CFUG).

The constitution of the CFUG was prepared/drafted by the Ranger. However, it was extensively discussed in the general meeting of the users which was participated in by one representative (male or female) from all 152 households. It was revealed that it were mainly the males who spoke something about what the constitution contains. They reported that constitution contains the rules/regulations which aim at controlling prohibited activities (of forest exploitation) through the imposition of penalties and thereby protecting the forest. But no further details were reported by the

members of the executive committee and general users. Almost all the representatives of the user households had also participated in the general meeting for the formation of the users' executive committee. The 11 members of the committee and two advisors were consensually selected after the participatory discussion and deliberation of the users. User informants were satisfied with the selection process which also included representatives from the lower castes. The forest management plan was first drafted/prepared by the Ranger and was discussed in the general meeting. Most of the female informants cannot explain what the forest management plan contains. But a few female informants and most of the male informants are of the view that it contains the details about the management of the community forest (which includes ways of forest management such as plantation, thinning/clearing, collection of fuelwood and dry leaves and timber extraction, etc.) Until last year, the farmers used to collect fallen, dead and decayed non-timber wood as fuelwood free of cost. But this year onwards, they have planned to open up forest for not more than 10 days in a year for the collection of fuelwood through pruning and thinning. Violaters are strictly penalized and the fine ranges from Rs. 10 to Rs. 100 (depending upon the degree of crime). The users have already divided the forest into five blocks/plots for the rotational pruning and thinning. The Ranger has provided the training to users on plantation techniques, pruning, thinning and selective harvesting (e.g. collection of old, dead and dying trees). Though users can collect dry leaves/litter free of cost any time, timber extraction from live trees is strictly restricted. Nonetheless, the member households can extract the timber from the dying/dead trees by paying Rs. 50 per tree.

Female user informants do not have knowledge about the community forest and soil conservation policies. But male informants are of the view that community forest policy lays emphasis on the forest protection by the user community and for which the forest is handed over to them. They also do not have its deep knowledge. They also do not know about the soil conservation. Despite this fact, a few male and female informants reported that they had seen the soil conservation activities launched by the District Agriculture Office which had also provided a short training to the local women on soil conservation. A few local women have practiced to plant the banana trees on the side of their farmlands. Majority of the informants of both sexes know that the right of the user group is to enjoy the forest products and its responsibility is the protection of the forest. Silvicultural skills are required for the management of the forests. The right of the executive committee is to work for the enforcement of the rules and regulations outlined in the constitution (including the sale of the forest products, imposition of fines and checking the forest destruction) whereas its responsibility is to manage the forest on the basis of the use of silvicultural skills. It also arranges meetings, contacts District Forest Officer (DFO) and maintains records.

The responsibility of the forest officials is to impart training on forest management skills and they also reserve the right of the resumption of the community forest if it is not properly managed. The forest management behaviour is already indicated in the preceding paragraph. The community holds positive attitude towards the forestry officials for a number of services rendered such as assistance in the drafting of the constitution and forest management plan and provision of the training.

There are a limited number of the medicinal plants available in the forest such as *Amala* (used for common cold and preparation of pickle and *Harro* (used for curing the cough). The locals can

collect/exploit these plants free of cost. No training has been imparted on the skills of their exploitation for their sustainable use. However, they are exploiting other non-timber forest products sustainably (such as cutting grass in the rainy season leaving the root for the future growth, collection of fallen green branches for fodder and dry fallen branches for the fuelwood, etc.).

8.0 KRISHNA HIMALI COMMUNITY FOREST USERS' GROUP, SALYAN (PRE- HAND OVER)

This Krishna Himali Community Forest Users' Group (CFUG) is in ward number one (Mulabari village) of Tribeni Village Development Committee (VDC) of Salyan district. It is approximately 4 kilometers away from the motorable road. The total area of forest is 30 hectares. It is a conserved forest. The total number of users' households is 35 with a total population of 275 of which 141 are males and 134 females. There is not any non-user household. The community consists of mainly the Magars, Chhetris and Brahmins. There is an executive committee of 14 members of which three are females. The age of executive committee ranges from 20 to 60 years and only nine of them are literate. Agriculture is the predominantly practiced economic activity in the community. The major crops grown are maize, paddy, wheat, groundnut, mustard oil and soybean. Most of the users have food deficiency for more than six months in the year.

Due to the massive destruction of the forest in the past and suggestion of the local forestry officials, everybody of this community took initiative for the conservation of the forest. They had appointed one watchman who was paid 6 kgs of cereal crops (could be paddy, wheat, millet) by every household per year. But this effort could not be successful because the forestry officials did not co-operate considering the forest within their jurisdiction. Later, in 1990, all representatives from 35 households gathered in a meeting to form community forest users' group. All males and a few females of these households were present which was also participated in by the Ranger. This meeting resulted in the formation of CFUG. There was no any conflict regarding the forest boundary and users' identification. Then, users also they applied for the registration of their CFUG. The Ranger helped the community to draft the constitution which outlined the rules and regulations for systematic forest management. After the extensive discussions on the constitution drafted by the representatives of all 35 households in the general meeting, it was approved consensually. Most of the female users do not know about preparation of the constitution due to their lesser participation.

The users's committee of 14 members (of which three are females and five are low caste people such as the Kamis and the backward ethnic group such as the Magar) were also elected unanimously from among general users. Then, the forest management plan was drafted by the Ranger in the villagers' general meeting. Most of the general users do not have knowledge about the details forest management plan. The Ranger also did the forest survey, mapping and prepared forest inventory. The forest is being managed in accordance with the plan. For example, forest is divided into two blocks. One block is used for pasture such as cattle grazing and fuelwood collection and the some amount of fee is fixed by user's committee. Another block named "Rani Ban" is not allowed to extract any of the forest products. A forest guard has also been appointed who is paid 3 kgs. of food grains and Rs. 12 annually as his salary by each household.

The forest is opened once a year for the extraction of the forest products. Fuelwood is distributed to the users according to their family size. The users are charged Rs. 25 for fuelwood, Rs. 200 for

Khar (thatching materials) and Rs. 150 to Rs. 500 for a pine tree for timber (depending on the size). The pine tree is harvested only for the purpose of building construction. In the protected forest, i.e. "Rani Ban", harvesting of forest products is strictly prohibited. However, this is opened for thinning and pruning activities for the fuelwood for last two days of rainy season. Any user can collect fuelwood by paying Rs. 2 per bundle or load to the committee's fund. The benefits derived from the forest products are always deposited in the users' fund which is managed by executive committee. Some of the money is invested to the users at the interest of 20 percent per annum. Bank account has not opened yet. With the help of this fund and the assistance of District Forest Officer (DFO), community has planted about 300 seedlings in the wasteland. Community has assigned task to each of the executive member in accordance with the constitution such as the chairman leads the community and secretary maintains records and manages accounts.

A few medicinal plants are also available such as *Barrow* (for cough treatment). *Malungo* is also available which is used for roofing purpose.

Male and female user informants have the knowledge on the government community forest policy which recognizes users as protectors and managers. They know that community forest users should manage the forest by themselves and plant new seedlings to check soil erosion. They have positive attitude towards government forest policies, rules and regulations because they have created good opportunity for the community people to manage forest for their future generation. They are also positive towards forestry officials as they have helped to prepare constitution and management plan including the formation of CFUG.

APPENDIX - 3

INDIGENOUS FOREST MANAGEMENT SYSTEMS

1. BILONA INDIGENOUS FOREST MANAGEMENT, BANKE

This IFM, locally called Kaneshori forest, is in the ward numbers five, six, seven and eight of Bilona VDC of Banke district. It is approximately 3 hours walk from the nearest seasonal motorable road across the Rapti river which is devoid of bridge. The area of the forest is 90 *Bighas* (one bigha is equivalent to .68 ha.). A total of 255 households with 3,500 population are currently using this forest. There are basically two types of people/users: (i) the autochthonous Tharus, and (ii) migrants of the neighbouring hill districts which are the Brahmins and Chhetris. The literacy rate among the Tharus is reported to be very low compared to the migrant Brahmins and Chhetris. The conservation of this national forest commenced in 1991 with the local people's participation. In fact, the initiative was, first of all, taken by a local resident -- a response to the massive deforestation (mainly timber extraction) during the period of revolution for the restoration of the multiparty democracy in 1990. The community support had taken initiative in 1992 despite the initial disagreements. There is a main executive committee of 15 members of which six are females from the caste group people of hill origin. Under this, ward forest protection committee consisting of 9 to 11 members has also been organized in each ward. The only other social development intervention is the literacy and social awareness programme of Backward Society Education (BASE) - an NGO run by Tharu conscious youths. The community is predominantly an agrarian. The Department of Irrigation constructed an irrigation canal in 1992-94 with the cash and labour contribution of the local people of ward number four of this VDC.

There are no written rules and regulations for the forest management. However, certain forest protection measures have been orally agreed by a general meeting of the users held initially which was participated in by the people from all wards. The forest protection measures include the prohibition to cut the green leaves, permission to be taken to collect grass and dead/dry/fallen wood for fuelwood and control of the forest fire. Local people are not allowed to take their ox-pulled cart to the forest for the transportation of forest commodities. Infraction results in the imposition of fines which is usually decided by the meeting of the committees.

At the beginning, forest guards were employed by the users' group in ward numbers five, six, seven and eight of Binona VDC for the protection of forest in the respective wards. They were almost invariably paid in kind, that is, payment of cereal crops after the seasonal harvest. Each household of each ward was required to pay one Lumber (5 kg.) of cereal crops (could be either paddy or wheat or maize). But later on, some households refused to pay the forest guards because of the unavailability of the desired quantity of the timber during the time of necessity. They started thinking that if some amount of money is paid to the Ranger, they would be allowed for the sufficient timber extraction as per their need. Therefore, at present, only two forest guards have been employed with the financial support of VDC office (that is, they are paid Rs. 1,000 per month by the VDC office's income source). Presently, if people need timber, they can collect dry timber from the forest according to their need but only with the approval of the VDC office.

It has been determined that the hill migrants have more knowledge about the community forestry policy and rules and regulations than the autochthonous Tharu. The *raison d'être* of being so is that there is a long tradition of community management of forest in the hills and currently, there is also a more practice of handing over forests to the communities which the migrants know due to their regular contact with the provenances. But the Tharus, due to the plethora of forest resources, neither practiced community management of forest resources in the past nor are exposed to CFUG at the present. However, some users have the idea of the constitution and forest management plan also. But there does not seem to be the awareness towards the soil conservation policy. But people have the knowledge that if trees are planted on the both sides of the Rapti river, soil erosion would be controlled. As per the forest policy, the right of the users' group is to enjoy the forest products (such as fuelwood, fodder, timber etc.) sustainably and forest protection, in accordance with their verbally agreed rules and regulations, is their responsibility. But majority of the informants held the opinion that except the "fire protection" (for which training to a few users and members of the executive committee has been imparted by the Ranger office) and limited "selective harvesting", they do not know about the scientific silvicultural activities which has also the implication on forest management behaviour (such as no selection of species, no thinning, no clearing the inferior growths, no pruning, etc.).

By and large, the users have positive attitude towards the government community forestry policy because it allows the users to utilize the forest products as the community wishes. The forest officials also cannot threaten the community on the issue of the exploitation of the forest and government alone cannot protect the forest and hence, forests have to be handed over to the communities. The users are of the view that the governmental forestry service is inadequate because they lack the knowledge of scientific forest management. They want forestry officials to impart training to them on nursery establishment, plantation techniques, species selection, etc. Their attitude towards the forestry officials is good because they are being encouraged to practice the community forestry. However, some informants are of the opinion that forestry officials are not happy with the system of community forestry because they are losing their power and benefits which they used to enjoy in the past.

2. CHANDANPUR INDIGENOUS FOREST MANAGEMENT, DANG

Note: Historically speaking, indigenous forest management was practiced in the hills where there was the forest resource crunch as a function of the population explosion. Conversely, there was no need to initiate indigenous forest management in the Terai because of the plethora of forest resource and low population. But as malaria was eradicated in mid-1950s, there was an unprecedented influx of the hill migrants to the Terai (plains) and Inner Terai in search of the fertile land which resulted in the massive deforestation. Deforestation was also triggered off by excessive timber exploitation and smuggling. All this resulted in the forest resource crunch and lately, people have begun to take their own initiative for forest conservation. And the research team has studied an indigenous forest management which is also a relatively recent innovation in Dang District.

Chandanpur indigenous forest management is in ward number nine of Gadhuwa Village Development Committee (VDC). The area of the forest is 75 hectares. There is a total of 230 households who are currently utilizing this forest. The total population is 1900 of which 50 percent are males and 50 percent females. The predominant population is that of the Tharus (the autochthonous tribe) followed by the Brahmins/Chhetris, Yadavs, Magars, Kamis (blacksmith), Damais (tailor) and Sarkis (shoe-maker) -- all the latter three being traditionally the untouchables. The Brahmins/Chhetris and other untouchables are the migrants from the neighbouring hill districts such as Pyuthan and Rolpa. The literacy level was difficult to be determined. However, it was reported that the Brahmins and Chhetris have more literate people than other ethnic/caste groups and it follows as a corollary that the leadership of the community is also taken by them.

The field work has revealed that the forest under study was still dense 25 years back. But immigration from the neighbouring hill districts and the consequent land reclamation coupled with the excessive extraction of timber and fuelwood contributed to the loss of the valuable forest. In 1988-89, the District Forest Office took the initiative to plant saplings in the degraded forest land which was also participated in through the labour contribution by the local people. In 1992, the local people, being fully cognizant of the need of the forest protection, approached the District Forest Office and expressed their intention to manage the forest by themselves. This was also agreed by the forestry officials and subsequently, they formed a forest management executive committee which consisted of 14 members (no females). This committee was elected by the general meeting of the user households. But women group interview revealed that they do not know how many households are the general members of this forest users' group and how many members are there in the executive committee. This might be attributable to the exclusion of the women during the initial general meeting of the potential forest users. The community had decided its own unwritten rules and regulations apropos of the forest management such as imposition of fines on the entry of the livestock in the forest (e.g. Rs. 30 for a buffalo, Rs. 25 for a cow and an ox, Rs. 15 for a goat, Rs. 10 for a pig, Rs. 50 for the unauthorized mowing or extracting the fodder, etc.), prohibition on the extraction of timber and fuelwood from the forest at the moment, establishment of norms for the sale of non-timber

forest products which include Khar (thatching materials) grass for livestock and Siru (a kind of grass predominantly used for the preparation of broom) to earn income to run the recurrent cost for the forest management, prohibition on cutting the live trees, capture and kill the wild animals and cultivate the land for growing the crops, etc.

They have employed a Chaukidar (forest guard) who patrols the forest for its protection. He is paid Rs. 800 per month and the money for the payment of his monthly remuneration comes from the sale of non-timber forest products and the imposition of the fines. For example, in 1994, the community sold the grass worth of Rs. 6,000 and this year, they sold it worth of Rs. 3,000. They also charge Rs. 7.00 to the member household which mows grass for each adult buffalo, cow and ox (head counting of the animals and thereby multiplying the number of animals by Rs. 7 to calculate the amount to be charged to the grass mowing household per a particular season). Though most of female user informants and a few male user informants do not know why they are not registering as a CFUG and working with the government to get handover of their indigenously- managed forest, most of the male user informants reported that they do not know about the advantages of a formal CFUG formation. They also argue that they have already set their rules and regulations for forest management and hence, they do not know why they should register as a CFUG.

Most user male and female informants do not know exactly what are the community forestry rules and regulations. But a few the male informants think that they are framed for the conservation of the forest and they also view that preparation of a constitution and measurement of the forest with the help of the Ranger are some of the activities to be done for the handover of the forest to the CFUG. The users know that the right of the community is to enjoy the forest products and the responsibility is to protect the forest. Some male user informants claim that they have the knowledge of plantation, weeding and pruning but majority of the users do not have technical skills for forest management.

Since there are no internal group conflicts, there are no difficulties encountered for group organization. Neither there are the problems for the group regarding the distribution of benefits. They have positive attitude towards the government community forest policy because it will contribute to the conservation of the forest. But almost everyone is unaware of the soil conservation policy. They want forest management technical skills and more opportunities to participate in community forestry training/seminars and other relevant assistance for forest management. It was also revealed that some users do not know the government services for forest management.

3.0 SETE KHOLA INDIGENOUS FOREST MANAGEMENT, SALYAN

This Sete Khola Indigenous Forest Management (IFM) is in ward number four of Phalabang Village Development Committee (VDC). The total area of the forest is approximately 25 hectares. There is a total of 128 user households with a total population of 896 of which 457 are males and 439 are females. As reported by the key informants, 33 percent and 18 percent males and females are literate respectively. The community has Chhetris as the predominant caste group followed by the Magars. The community is predominantly an agrarian one which grows maize, millet, paddy, lentil, etc.

It has been ascertained that this forest has been conserved by the community for the last 100 years with the help of the unwritten mutually agreed upon rules and regulations to protect the forest from the haphazard exploitation. But in 1987, the community started conserving the forest by forming a committee (which was responsible for the overall management of the forest) and employing a *Chaukidar* (Forest Guard) who was responsible for patrolling the forest for its protection. The *Chaukidar* was paid two *Pathis* of food grains (one *Pathi* is equivalent to 3 kgs.) every year by each forest user household as an incentive (it is a kind of remuneration paid to him for his role to conserve the forest). But since the beginning of 1995, the users' household meeting decided to pay the *Chaukidar* in cash in lieu of commodity or food grains. And currently, every household has to pay Rs. 25 per annum to pay the remuneration of the *Chaukidar* (who is paid Rs. 700 per month). However, this collected amount is inadequate for the payment of the salary and hence, is supplemented by the sale of other forest products. Last year, the old forest management committee was dissolved and a new committee was formed which comprised 11 members including the two females. It was also reported that members of the committee represented different *Toles* (Pockets of village/settlement). The members of the forest management committee were democratically selected by the representatives present in the general meeting.

The users of the Sete Khola forest remove different types of forest products such as *Sal's* (*Sorea robusta*) green leaves free of cost (anytime when needed), *Babiyo* (a kind of grass grown wild which is used for making string/rope) in September, *Khar* (thatching materials) in January, fuelwood in February, etc. The general practice is to pay Rs. 5 for the wood to prepare one plough, Rs. 2 for a bundle of fuelwood, Rs. 30 for one cubic foot timber, Rs. 25 for the *Khar* (thatching materials). *Babiyo* is collected free of cost.

The users have planted new trees in the wasteland. In order to ensure the continuous supply of the forest products overtime, the users are found to have practiced collecting fallen wood/tree/dry branches, clearing the inferior growths/bushes and pruning the branches of the timber trees, etc. They extract the minimum quantity of fuelwood from the forest considering the future necessity. They do not sell any forest products to the outsiders.

The reason of not registering the forest user group until now at the District Forest Office is that they have been utilizing the forest for long and fulfilling their household needs without any major

constraint. However, they have recently applied to the District Forest Officer (DFO) for the registration of their a CFUG -- an impact of another adjoining CFUG within the same ward. Only a few male informants are knowledgeable about the CFUG handover process. They are of the opinion that application for registration, and preparation of constitution and forest management plan are the processes of CFUG handover process. The male and female informants are aware of the right of the user groups (such as enjoyment of timber and non-timber forest products) and responsibility (such as protection of forest by prohibiting the entry of the outsiders and imposing fines on the violators). It is also the responsibility of the users to plant trees, protect forest from the fire, and practice silvicultural activities (such as thinning, pruning and clearing) in the traditional way. Users are of the view that the rules and regulations of the community forestry help protect and manage the forest with the participation of the user community. Though they are practising some of the silvicultural activities in a traditional manner, they want scientific/modern forest management skills/training.

Though most of the male and a few female informants know community forestry policy, they lack knowledge on soil conservation policy. They have positive attitude towards the community forestry policy because it helps manage the forest in a better way for the benefit of the community. Male informants reported about the practical aspect of the soil conservation by asserting that if soil is not conserved, its productivity would be adversely affected. They have not had any extension services for forest management and soil conservation so far. They have neither faced any conflicting situation nor have had any problem pertaining to the distribution of benefits (because everybody is enjoying/utilizing the forest products as per the need).

4.0 PALLO PAKHA BHAND INDIGENOUS FOREST MANAGEMENT, PYUTHAN

This indigenously-managed forest is in ward number one of Khalanga Village Development Committee (VDC) of Pyuthan district. The total area of the forest is 62 hectares. There are a total of 100 households with a population of 600 of which 50 percent are males and 50 percent females. The predominant caste groups are the Brahmins and Chhetris followed by the Magars and Newars. There are also a few households of the untouchable groups, mainly the Kamis (blacksmiths) and Sarkis (shoe-makers). The overall literacy of the males, as reported, is 70 percent (mainly the Brahmins, Chhetris and Newars) and 35 percent that of the females. The literacy among the untouchables is low which is attributable to poverty and lesser interest/awareness about the importance of education/literacy. Despite the heterogeneity in the social composition of the caste/ethnic groups, there is homogeneity in the interest of the community vis-a-vis the development of natural resource management. Agriculture is the mainstay of the village economy. Farmers grow paddy and wheat, pulses and barley in the *Khet* (lowland) and maize, mustard, barley, wheat and pulses in the *Bari* (upland).

Only 4 percent of the total households are self-sufficient in food production whereas other 96 percent households are reported to be food-deficit which supplement their income from agricultural production by working as unskilled labourers (mainly in the construction activities) both in India and Nepal. To date, there have been no developmental activities implemented so far.

This forest has been managed indigenously for many years. The users recall that it was protected and managed even during the Rana regime (hereditary prime ministership of the Ranas for 104 years, that is, between 1846 and 1951). The protection and management of the forest was taken care of by Shive *Guthi* (a local community organisation which took care of the management of the land granted to the religious institution and its income was primarily used for performing the religious rituals and maintaining the structures of the institutions). Forest, during those days, could be exploited only through the permission of the *Guthi* organization which helped control the haphazard exploitation. This system continued until 1961. Then, during the *Panchayat* regime (a non-party system which lasted for 30 years from 1961 to 1990), the ward member (an elected representative of the lowest level of administrative and political unit) was given the responsibility to care for the protection and management (i.e. forest could be exploited only through his permission to meet the household requirements). Since 1990, the local users themselves have been managing and protecting the forest in a more organized manner -- an impact of a neighbouring community-managed forest and gradual degradation of the forest after the downfall of the *Panchayat* regime. They have formed a 'users committee' of seven members (only males) who have been consensually selected by the general meeting. This 'users committee' has been entrusted with the responsibility of managing the forest on a controlled basis.

Currently, the forest has been divided into two sections such as 'grazing area' and *Rani Ban* (meaning protected queen's forest). Animals are allowed to graze in the 'grazing area' but the *Rani Ban* is

strictly prohibited for grazing and only dry, decayed and fallen branches/twigs/old trees are allowed for exploitation or collection to meet the household forest product requirements. Collection of fuelwood is allowed twice a week, that is, Friday and Saturday. And fuelwood can be collected according to the household needs. But only one person from one household can collect one *Bhari* in one day. Similarly, each household is allowed to extract two *Bharis* of fodder (bundle of about 40 kg.) daily (if needed).

At present, the users are interested for having the forest handed over. But they are confronted with a serious problem of the identification of the users' group because the inhabitants of the two wards of another VDC are also utilizing the forest. And therefore, all of the users of ward number one of Khalanga VDC and the users of the inhabitants of the two wards of another VDC have been claiming the forest as theirs. So the identification of the community forest users' group (CFUG) has not been finalized which is the impediment of the whole process of the livelihood of forest handover. This inter-group conflict has not been resolved to date.

The interview has revealed that the user male and female informants are knowledgeable about the process of the handover of the forest such as application to the District Forest Officer (DFO), submission of the copies of constitution and management plan to DFO and their approvals are the major steps of fulfilling the pre-conditions of the handover of the forest. The male informants reported that constitution is the embodiment of the rules and regulations which helps protect and manage the forest. Female informants are not aware of this. But informants of both sexes are of the view that the right of the users is to enjoy the forest products according to their needs and their responsibility is to protect and manage the forest in the way prescribed by the rules and regulations enacted consensually by them (No violation of the rules and regulations). The user informants of both sexes have held positive attitude towards the government community forest policy because it aims at protecting and managing the forests through the involvement of the community. But they are unaware of the soil conservation policy. The group of users needs technical advice and guidance for the better management of forest.